Polytechnic Reader and Web
Addict's Hotspot

PRAWAH

**COMPUTER ENG DEPARTMENT
K D POLYTECHNIC, PATAN**

3rd Edition (JUNE-2022)

WORK IS WORSHIP

COMPUTER ENGINEERING DEPARTMENT

ABOUT DEPARTMENT:

K D Polytechnic, also known as **Kilachand Devchand Polytechnic**, was established in **1961** in **Patan**, **Gujarat**. Computer Department is established in the year of **2000**. Department has Total Intake: **180** (First Shift-120, Second Shift-60). Under the leadership of *Shri J. M. Joshi* Computer department is moving forward. The use of online teaching-collaborating tools like MS Team by Microsoft, for sharing the resources, assessment and related activities help as a mixture of traditional as well as active learning pedagogy to support contemporary ICT based technical education.

HEAD MESSAGE:

સ્નેહી વાચકો,

મિત્રો, મારા માટે આ ખુબ જ આનંદની વાત છે કે આપણા કમ્પ્યુટર વિભાગના મેગેઝીન "PRAWAH-Polytechnic Reader And Web Addict's Hotspot" નો આ તૃતીય અંક સફળતા પુર્વક વાચકો સામે આવે છે.વિદ્યાર્થીઓએ આ મેગેઝીનને જે પ્રેમ સાથે આવકાર આપયો છે તે આ મેગેઝીનના સંપાદકો અને જોડાયેલ દરેક વ્યક્તિ માટે ઉત્સાહ વર્ધક વાત છે.છેલ્લા બે અંકોમાં વિદ્યાર્થીઓએ પોતાના ટેકનીકલ, નોન-ટેકનીકલ તથા મૌલિક વિચારોને અલગ-અલગ આર્ટીકલના માધ્યમથી રજુ કર્યા છે.

વિધ્યાર્થીઓને સર્જનાત્મક પ્રેરણા પુરી પાડવા માટે અધ્યાપક મિત્રો પણ પોતાની મૌલિક કૃતિને આ મેગેઝીનમાં મુકે છે અને "Learning through settingexample" ના સુત્રને સાર્થક કરે છે.એક વાચક હજાર જીવન જીવે છે અને જે નથી વાચતા તે માત્ર એક જ. આ મેગેઝીન હમેશા તેના વાચકોના હદયમાં સ્થાન પામે તે જ અભ્યર્થના...

Shri J. M. Joshi
Head of the Department,
Computer Engineering

FROM EDITORIAL DESK

દરેક વ્યક્તિના સર્વાંગી વિકાસમાં શૈક્ષણિક તેમજ બિનશૈક્ષણિક પ્રવૃત્તિનું સમાન મહત્વ છે. આથી દરેક વિદ્યાર્થી પોતાના શિક્ષણની સાથે તેમનામાં રહેલી આંતરિક ખૂબીઓનો વિકાસ કરી શકે તેવા ઉદ્દેશ્યથી વિભાગીય ઈ-સામાયિક PRAWAHનો જન્મ થયો. જોત જોતામાં દર ડ માસે પ્રસિદ્ધ થતા ઈ-સામાયિક PRAWAHની ત્રીજી આવૃત્તિ આપણી સમક્ષ રજુ કરતા હું ખુબ આનંદની લાગણી અનુભવું છું. ભૂતપૂર્વ બંને આવૃતિની જેમ આ આવૃત્તિ દરમિયાન વિદ્યાર્થીમિત્રો તેમજ શિક્ષકમિત્રો તરફથી મળેલ સહકાર અસાધારણ તેમજ પ્રેરણારૂપ છે.

પ્રસ્તુત આવૃત્તિમાં વિદ્યાર્થીમિત્રો તેમજ શિક્ષકમિત્રો દ્વારા જુદા જુદા વિષયો પર તકનીકી તથા બિનતકનીકી લેખોનો સમાવેશ કરેલ છે. જેનું વાંચન કરવાથી ચોક્કસપણે આપ સૌને કંઈક નવું જ્ઞાન પ્રાપ્ત થશે તેમજ તમારા પાસે રહેલા જ્ઞાનને આવનારી આવૃત્તિમાં રજુ કરવાનું પ્રેરણાબળ મળશે.

વિશ્વ જે ગતિથી આગળ વધી રહ્યું છે એ મુજબ આપણે સૌએ આગળ વધવા આપણી પાસે રહેલી આવડતની આપ-લે કરવી પડશે. આમ કરવાથી જ આપણે ઝડપથી સૌની સાથે સ્પર્ધા કરવા સક્ષમ બનીશું. તો ચાલો આપણે એકબીજાના સથવારે આગળ વધીએ તેમજ આપણા પોતાના ઈ-સામાયિક PRAWAHને નવી ઉંચાઇ સુધી લઇ જઇએ.

Shri. K. M. Madhu
Editorial Team Member

COMPUTER ENGINEERING DEPARTMENT

VISION

To produce competent diploma engineers through quality education with moral values to meet need of the society.

MISSION

i)   To provide quality education in both theory and practical to solve the problems.
ii) To encourage students for cocurricular activities.
iii) Provide exposure to latest technology.
iv) Transform students into socially responsible and ethical professional.

PROGRAM EDUCATIONAL OBJECTIVES

The diploma holders will be:
i)   Competent with knowledge of Computer Engineering to pursue higher education.
ii) Sound knowledge in basic science, mathematics and engineering fundamentals.
iii) Proficient to solve problems that are technically, economically, socially and environmentally acceptable.
iv) Efficient team leader, effective communicator and entrepreneur with ethics and moral values.

PROGRAM OUTCOMES

i) **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

ii) **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

iii) **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

iv) **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

v) **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.

vi) **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

vii) **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

PROGRAM SPECIFIC OUTCOME

After the completion of the program, in future students will be able to have

i) An ability to analyse, design, develop and test software using different programming language

ii) An ability to setup, analyse, design and troubleshoot network and computer hardware issues.

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THE COMPUTER VIRUS

A computer virus is a malicious piece of computer code designed to spread from device to device. A subset of malware, these self-copying threats are usually designed to damage a device or steal data.

Computer Virus! Good or Bad?

By its nature, a virus spreads randomly from machine to machine, so there is no way of knowing where it may ultimately go. Even a "good" virus uses system resources such as disk space, memory and CPU time. All programs, including viruses, contain bugs that can have unintended and damaging consequences.

What Does a Computer Virus Do?

The way a computer virus acts depends on how it's coded. It could be something as simple as a prank that doesn't cause any damage, or it could be sophisticated, leading to criminal activity and fraud. Many viruses only affect a local device, but others spread across a network environment to find other vulnerable hosts.

A virus that infects a host device will continue delivering a payload until it's removed. Most antivirus vendors have small removal programs that eliminate the virus. Polymorphic viruses make it

difficult for removal because they change their footprint consistently. The payload could be stealing data, destroying data, or interrupting services on the network or the local device.

Types of Computer Virus...

Every virus has a payload that performs an action. The threat actor can code any malicious activity into the virus payload, including simple, innocuous pranks that don't do any harm. While a few viruses have harmless payloads, most of them cause damage to the system and its data. There are nine main virus types, some of which could be packaged with other malware to increase the chance of infection and damage. The major categories for viruses are:

1. Boot Sector Virus

Your computer drive has a sector solely responsible for pointing to the operating system so that it can boot into the interface. A boot sector virus damages or controls the boot sector on the drive, rendering the machine unusable. Attackers will usually spread this virus type using a malicious USB device. The virus is activated when users plug in the USB device and boot their machine.

2. Web Scripting Virus

Most browsers have defenses against malicious web scripts, but older, unsupported browsers have vulnerabilities that allow an attacker to run code on the local device.

3. Browser Hijacker

A virus that can change the settings on your browser will hijack browser favorites, the home page URL, your search preferences and

redirect you to a malicious site. The site could be a phishing site or an adware page used to steal data or make money for the attacker.

4. Resident Virus

A virus that can access computer memory and sit dormant until a payload is delivered is considered a resident virus. This malware may stay dormant until a specific date, time, or a user performs an action.

5. Direct Action Virus

When a user executes a seemingly harmless file attached with malicious code, direct action viruses deliver a payload immediately. These viruses can also remain dormant until a specific action is taken or a timeframe passes.

6. Polymorphic Virus

Malware authors can use polymorphic code to change the program's footprint to avoid detection. Polymorphic viruses make it more difficult for an antivirus to detect and remove them.

7. File Infector Virus

To persist on a system, a threat actor uses file infector viruses to inject malicious code into critical files that run the operating system or important programs. When the system boots or the program runs, the virus is activated.

8. Multipartite Virus

These malicious programs spread across a network or other systems by copying themselves or injecting code into critical computer resources.

Examples of Computer Virus

The web contains millions of computer viruses, but only a few have gained popularity and infect record numbers of machines. Some examples of widespread computer viruses include:

Nimda, ILOVEYOU, SQL Slammer, Stuxnet, CryptoLocker, Conficker

The Most Recent Computer Virus Attacks…

- **Telangana and AP Power Utilities Hacked**

A malicious software attacked the power utility systems of Telangana and Andhra Pradesh last year where all the servers went down until the glitch was rectified. Since the computer systems of Telangana and Andhra Pradesh power utilities were interlinked, the virus attack quickly spread, taking down all the systems.

- **BSNL Malware Attack**

The state-owned telecom operator BSNL was hit by a major malware attack, impacting nearly 2000 broadband modems! 60,000 modems became dysfunctional after the malware attack hit the Telecom Circle. As we continue to develop smart cities and smart grid technologies in 2021, the risk of ransomware attacks will stay put as a big challenge for all organizations. Apart from focusing on development and advancement, every industry vertical must understand the crucial role of cyber security.

How to Prevent Computer from Viruses?

Antivirus should run on any device connected to the network. It's your first defense against viruses. Antivirus software stops malware executables from running on your local device.

Don't open executable email attachments: Many malware attacks including ransomware start with a malicious email attachment. Executable attachments should never be opened, and users should avoid running macros programmed into files such as Microsoft Word or Excel.

Keep your operating system updated: Developers for all major operating systems release patches to remediate common bugs and security vulnerabilities. Always keep your operating system updated and stop using end-of-life versions (e.g., Windows 7 or Windows XP).

Avoid questionable websites: older browsers are vulnerable to exploits used when just browsing a website. You should always keep your browser updated with the latest patches but avoiding these sites will stop drive-by downloads or redirecting you to sites that host malware.

Don't use pirated software: Free pirated software might be tempting, but it's often packaged with malware. Download vendor software only from the official source and avoid using software that's pirated and shared.

Luhar Saurabh

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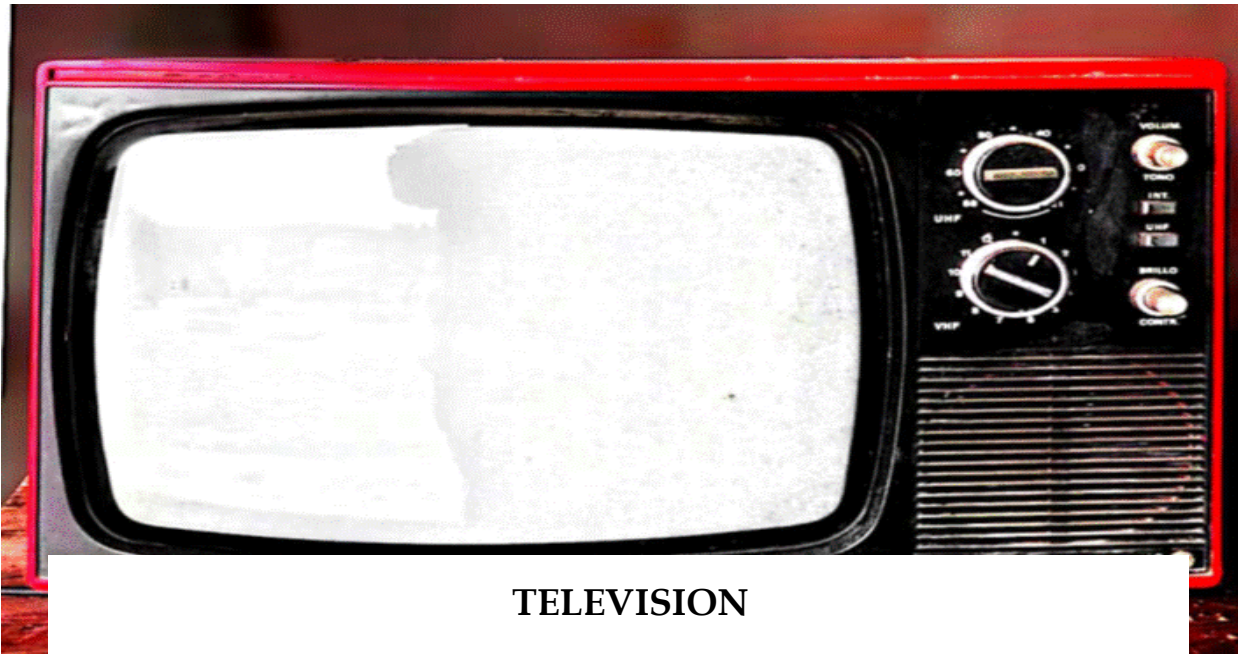
TELEVISION

Scince has discovered a lot of beautiful things in society and has made the life of people relaxed and comfortable. Television is one of the most numerous and most fascinating of the video is not very new. After the development of wirless,scientision j.l baird was the first man to develop television in 1922.he was a Scottish scientist.

Television in india

In India, terrestrial television started with the experimental telecast in Delhi on September 15, 1959, with a small transmitter and a makeshift studio. The regular daily transmission started in 1965 as part of All India Radio. In the beginning, only educational programmes and news were telecast.

Gradually entertainment programmes—mostly play, concerts, and film-based music/dance—were also telecast. The television service was extended to Bombay (now, Mumbai) and Amritsar in 1972.

Doordarshan remained the sole provider of television in India till 1975.

Television services were separated from radio in 1976. Six years later, national telecasts were introduced. In 1982, color television was introduced in the Indian market. Indian small screen programming started off in the early 1980s. Over time, regional channels were opened and the reach of television widened stupendously.

Advantages of television

Good for Gaining Knowledge: TV assists with redesigning information, it assists you with knowing the most recent pattern on the planet. It is these days one of the broadly utilized correspondence media, valuable data can be reached to a huge number of individuals straight by TV. You can get an entire look everywhere, and many individuals love TV such a lot of that they make their vocations out of it. We can gain proficiency with a few dialects and heaps of other helpful things by staring at the TV, a few shows and channels offer instructive projects that can build our insight and make us more mindful of our general surroundings. It can interface us to the world and then some.

Flexibility: Anyone can stare at the TV basically by sitting at home, News, motion pictures, family shows, sports, and music just as other valuable shows and channels should be visible on TV. It assumes a significant part in teaching individuals about debasement, and they can build their insight into the social and political world.

Educational channels: There are also many DIY channels out there that teach you how to do simple home renovations, how to do some interior decorating, how to make some simple things out of various materials, how to cook – the list of benefits goes on. So, in this regard, TV provides you with the knowledge that you can use and implement in your life.

Disadvantages of television

Television can make you lazy: Rather than going out with friends and family, you may just want to lounge on the couch and watch some TV instead. Or you may opt to watch TV instead of doing homework, chores, and other things that you really should be doing.

Television can also be addictive. Those who watch a lot of TV may find it harder to stop. You may just want to go home from work or school and watch your favorite TV shows and do nothing else.

Violence & illicit content: There is an abundance of violence and illicit content on TV. This becomes especially problematic for children. Some researchers believe that when kids see violent acts on TV, they are more likely to re-enact the violence in real life.

Health Hazards: TV hurts your health. Some studies have found a correlation between TV watching and obesity. It's also been found that watching more than three hours of TV a day can contribute to a wide variety of health problems like behavior problems, sleep problems, and even lower grades.

Patel Shreya
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PYTHON- GLUE LANGUAGE

Python is a general purpose, dynamic, high-level, and interpreted programming language. It supports Object Oriented programming approach to develop applications. It is simple and easy to learn and provides lots of high-level data structures.

Python was invented by **Guido van Rossum** in 1991 at CWI in Netherland. The idea of Python programming language has taken from the ABC programming language or we can say that ABC is a predecessor of Python language.

Why learns Python?

Python provides many useful features to the programmer. These features make it most popular and widely used language. We have listed below few-essential feature of Python.

- Easy to use and Learn
- Expressive Language
- Interpreted Language
- Object-Oriented Language
- Open Source Language
- Extensible

- Learn Standard Library
- GUI Programming Support
- Integrated
- Embeddable
- Dynamic Memory Allocation
- Wide Range of Libraries and Frameworks

Python Popular Frameworks and Libraries

Python has wide range of libraries and frameworks widely used in various fields such as machine learning, artificial intelligence, web applications, etc. Popular frameworks and libraries of Python are:

- **Web development (Server-side) -** Django Flask, Pyramid, CherryPy
- **GUIs based applications -** Tk, PyGTK, PyQt, PyJs, etc.
- **Machine Learning -** TensorFlow, PyTorch, **Scikit-learn**, Matplotlib, Scipy, etc.
- **Mathematics -** Numpy, Pandas, etc.

Glue code in Python

Python is often described as a "glue language," meaning it can let disparate code (typically libraries with C language interfaces) interoperate. Its use in data science and machine learning is in this vein, but that's just one incarnation of the general idea. If you have applications or program domains that you would like to hitch up, but cannot talk to each other directly, you can use Python to connect them.

Palak S. Dhobi
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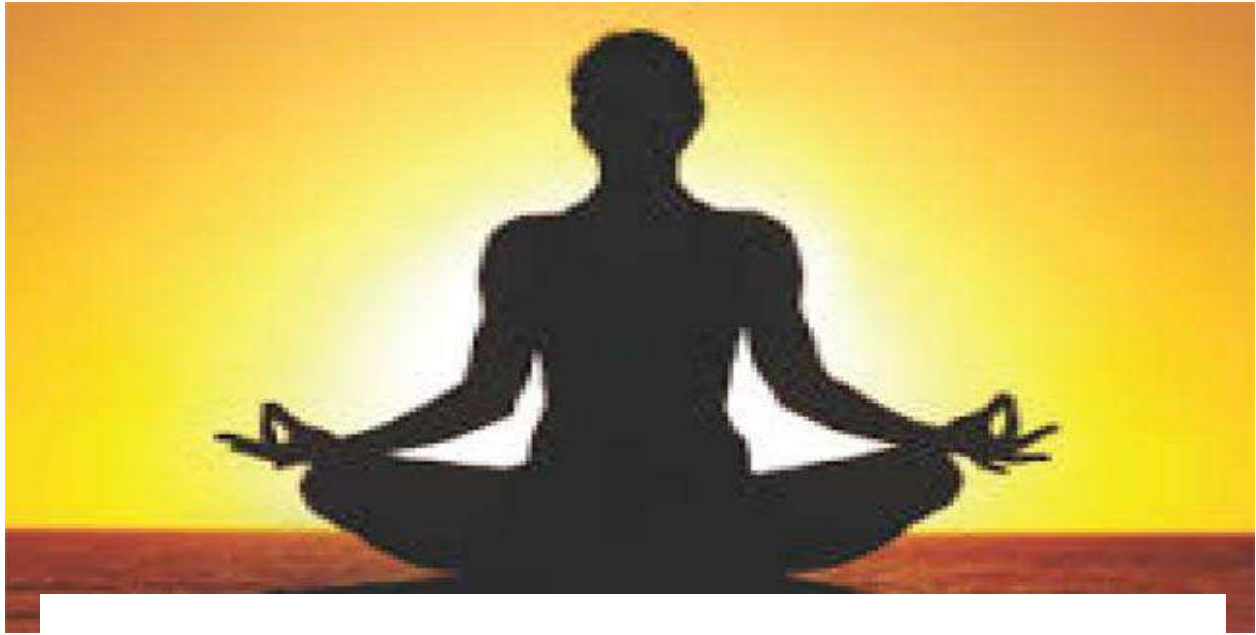
YOGA'S IMPORTANCE IN LIFE

A 3,000 year old tradition, yoga, is now regarded in the Western world as a holistic approach to health and is classified by the National Institutes of Health as a form of Complementary and Alternative Medicine (CAM). The word "yoga" comes from a Sanskrit root "yuj" which means union, or yoke, to join, and to direct and concentrate one's attention. Yoga can be traced back to northern India over 5,000 years ago; Indian monks spread their knowledge of yoga in the west during the late 1890s. Modern yoga teachings became widely popular in Western countries by the 1970s. Regular practice of yoga promotes strength, endurance, flexibility and facilitates characteristics of friendliness, compassion, and greater self-control, while cultivating a sense of calmness and well-being. Sustained practice also leads to important outcomes such as changes in life perspective, self-awareness and an improved sense of energy to live life fully and with genuine enjoyment.

The International Day of Yoga has been celebrated annually on 21 June since 2015, following its inception in the United Nations General Assembly in 2014. Yoga is a physical, mental and spiritual practice which originated in India. The practice of yoga produces a physiological state opposite to that of the flight-or-fight stress response and with that interruption in the stress response, a sense of balance

and union between the mind and body can be achieved.

Yoga is a form of mind-body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of the self, the breath, and energy. Yoga philosophy and practice were first described by Patanjali in the classic text, Yoga Sutras, which is widely acknowledged as the authoritative text on yoga. Today, many people identify yoga only with asana, the physical practice of yoga, but asana is just one of the many tools used for healing the individual; only three of the 196 sutras mention asana and the remainder of the text discusses the other components of yoga including conscious breathing, meditation, lifestyle and diet changes, visualization and the use of sound, among many others. In Yoga Sutras, Patanjali outlines an eightfold path to awareness and enlightenment called ashtanga which literally means "eight limbs". The eight limbs are comprised of ethical principles for living a meaningful and purposeful life; serving as a prescription for moral and ethical conduct and self-discipline, they direct attention towards one's health while acknowledging the spiritual aspects of one's nature. Any of the eight limbs may be used separately, but within yoga philosophy the physical postures and breathing exercises prepare the mind and body for meditation and spiritual development. Patanjali's eight limbs, many different yogic disciplines have been developed. Each has its own technique for preventing and treating disease.

In the Western world, the most common aspects of yoga practiced are the physical postures and breathing practices of hatha yoga and meditation. Hatha yoga enhances the capacity of the physical body through the use of a series of body postures, movements (asanas), and breathing techniques (pranayama). The breathing techniques of hatha yoga focus on conscious prolongation of inhalation, breath retention and exhalation. It is through the unification of the physical body, breath, and concentration, while performing the postures and movements that blockages in the energy channels of the body are cleared and the body energy system becomes more balanced.

Yoga is a mind and body practice. Various styles of yoga combine physical postures, breathing techniques, and meditation or relaxation .Yoga is recognized as a form of mind-body medicine that

integrates an individual's physical, mental and spiritual components to improve aspects of health, particularly stress related illnesses. Yoga is a form of CAM that produces a physiological sequence of events in the body reducing the stress response. The scientific study of yoga has increased substantially in recent years and many clinical trials have been designed to assess its therapeutic effects and benefits. As participation rates in mind-body fitness programs such as yoga continue to increase, it is important for health care professionals to be informed about the nature of yoga. Yogic practices enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function, promote recovery from and treatment of addiction, reduce stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall well-being and quality of life. It is associated with the meditation of body and mind through the relaxation of body. It is very useful to control over mind and body as well as getting proper health of body and mind by reducing the stress and anxiety. Yoga can be practiced by anyone as an exercise on daily basis to fulfill the need of very active and demanding life especially teenagers and adults. It helps in coping with the hard times of the life and pressure of school, friends, family and neighbors. Through yoga practice, one can minimize his/her problems and stress given by others. It helps in easily accomplishing the connection between body, mind and nature. Mental health problems such as depression, anxiety, stress, and insomnia are among the most common reasons for individuals to seek treatment with complementary therapies such as yoga. Yoga encourages one to relax, slow the breath and focus on the present, shifting the balance from the sympathetic nervous system and the flight-or-fight response to the parasympathetic system and the relaxation response.

One of the main goals of yoga is to achieve tranquility of the mind and create a sense of well-being, feelings of relaxation, improved self-confidence, improved efficiency, increased attentiveness, lowered irritability, and an optimistic outlook on life. The practice of yoga generates balanced energy which is vital to the function of the immunity system .Many patients turn to complementary therapies due to the adverse effects of medication, lack of response or simply preference for the complementary approach. A number of studies demonstrate the potential beneficial effects of yoga interventions on depression, stress, and anxiety. Improved flexibility is one of the first

and most obvious benefits of yoga. With continued practice comes a gradual loosening of the muscles and connective tissues surrounding the bones and joints; this is thought to be one reason that yoga is associated with reduced aches and pains. Yoga helps to build muscle mass and/ or maintain muscle strength, which protects from conditions such as arthritis, osteoporosis and back pain.

Yoga increases blood flow and levels of hemoglobin and red blood cells which allows for more oxygen to reach the body cells, enhancing their function. Yoga also thins the blood which can decrease the risk of heart attack and stroke, as they are often caused by blood clots. Twisting poses wring out venous blood from internal organs and allow oxygenated blood to flow in when the twist is released. Inverted poses encourage venous blood flow from the legs and pelvis back to the heart and then pumped through the lungs where it becomes freshly oxygenated.

Numerous studies show that asana, meditation or a combination of the two can reduce pain and disability while improving flexibility and functional mobility in people with a number of conditions causing chronic pain. In some cases use of pain medication was reduced or eliminated completely. Yoga was also shown to improve gait function and reduce age-related changes in gait among a group of healthy, non-obese elders. There are different poses we can practice for yoga such as Shashankasana(Rabbit pose), Parvtasan (Mountain pose), Bhujangasan(Cobra pose), Tree pose, Triangle pose, Seated Half Spinal Twist Pose, Chakrasana(Wheel pose). This all poses are using to improve posture, body structure and also improve physical and mental strength.

Now a day, as we can see too much pollution and day by day increment any epidemic or pandemic situation. In this situation, our immunity system is decreasing day by day and too much user of technical device by children is effect their physical and mental health , that's why we should daily practice of yoga for improve our immunity system and living healthy lifestyle.

Aayushi Thakkar
206310307094

મા

એક નાનુ બાળક કહે છે,
"મેં કદી ભગવાન તો જોયા નથી પણ,
મને વિશ્વાસ છે કે તે પણ મારી "<u>મા</u>" જેવા જ હશે."

ઈશ્વરે જ્યારે પ્રેમનું સર્જન કર્યું હશે ત્યારે સૌપ્રથમ મા બનાવવાનું વિચાર્યું હશે. અનન્વય અલંકારમાં એમ કહીએ કે વાત્સલ્યની મૂર્તિ એટલે મા, મા એટલે વાત્સલ્યની મૂર્તિ, તો કંઈ ખોટું નથી.એના જેવી વ્યક્તિ આ જગતમાં ક્યાંય મળે એમ નથી. માતાનો જોટો જડવો મુશ્કેલ છે. માતા, માં, જનની, મમ્મા આ શબ્દો સાંભળતા ની સાથે જ બાળકની આંખમાં એક અનેરી ચમક આવી જતી હોય છે.

બાળકને જન્મ આપનાર અને એનું લાલનપાલન કરી જીવનનું સુયોગ્ય ઘડતર કરનાર માતાની અમૂલ્યવાન સેવાનો બદલો બાળક ૭ જન્મમાં પણ ઉતાારી શકે તેમ નથી. બાળક જ્યારે માના ઉદરમાં હોય ત્યારથી માંડીને એ મોટું ને સમજણું થાય ત્યાં સુધીમાં અનેક કષ્ટો વેઠનાર અને પોતાના શરીર સુખ ના ભોગે પોતાના બાળકની માવજત કરનાર માતાને જો ઈશ્વરે પેદા જ ના કરી હોત તો આપણું શું થાત ? કોણે લાલન પાલન કર્યું હોત ? કોણે આપણને સંસ્કાર આપ્યા હોત? કોણે આટલો પ્રેમ લુટાવ્યો હોત?

માતાનું મહત્વ તો તમે એકવાર જઈને અનાથાશ્રમમાં રહેતા બાળકને જોઈને કે તેની સાથે વાતચીત કરીને જોશો તો સમજાશે કે કેટલુ મુશ્કેલ છે. ખુદ ઈશ્વર પણ એની જોડે બેસી શકે તેમ નથી.

કુટુંબમાં માતાનું સ્થાન શ્રેષ્ઠ છે. બાળઉછેરમાં માતાનું સ્થાન અજોડ છે. પ્રસૂતિની

પીડા મા જ સહન કરે છે, મા બાળકને સતત સંભાળ રાખે છે. બાળક પથારી ભીની કરે તો મા પોતે ભીનામાં સૂઈ જાય છે, પરંતુ બાળકને તે સુકામાં સુવડાવે છે. બાળકને સવારે ઉઠાડવું, તેને નવડાવીને તૈયાર કરવું, તેને સમયસર દૂધ-નાસ્તો, ભોજન આપવુ, બાળકને તૈયાર કરી શાળાએ મોકલવું, બાળક બીમાર પડી જાય ત્યારે રાત-દિવસ ઉજાગરા વેઠીને બાળક ની સેવા કરવી, આ બધા કામોમાં મા થાકી જાય ખરી પણ ક્યારે કંટાળતી નથી.

એક મા કદાય અભણ હોઈ શકે, પણ એ હંમેશાં પોતાના સંતાનને દુનિયાનું સર્વશ્રેષ્ઠ મનુષ્ય બનાવવા મોંઘામાં મોંઘુ ભણતર આપી તેમનામાં સંસ્કારોનું સિંચન કરે છે. એટલે જ શાસ્ત્રોમાં જો કોઈને પ્રથમ ગુરુ કયા હોય તો એ છે મા. માની મમતા શબ્દોમાં જણાવી ખૂબ જ કઠિન છે એટલે જ કહું છે ને કે માં તો ભગવાનનું સ્વરૂપ છે.

જો ઘરેથી માં ના આશીર્વાદ લઈને નીકળો ને, તો દુનિયાની કોઈ તાકાત તમને હરાવી ન શકે. એક મા આગળ તો દુનિયા નો વૈભવ પણ ટૂંકો લાગે સાહેબ એકવાર જરા નજર નાખજો એ બાળકોના બાળપણ પર, જે જેમણે કોઈક કારણોસર પોતાની માતાનુ ગુમાવી છે. અને આપણી પાસે જો આપણી મા હોય ને તો ચહેરાની ચમક અલગ હોય છે.

બાળકોમાં સંસ્કાર સિંચન કરવામાં મા નો ફાળો અમૂલ્ય હોય છે. પિતા ધંધાર્થે બહાર જાય છે, બાળક સાથે માં જ વધારે સમય રહે છે, કુદરતે પણ માતામાં ભરપૂર વાત્સલ્ય ભર્યું છે. મા બાળકને વાર્તા સંભળાવે, ગીત ગાવે, તેની સાથે વાર્તાલાપ કરે તેનાથી બાળકમાં અવનવા સંસ્કારોનું સિંચન થાય છે. બાળકમાં પ્રેમ, સંપ, સહકાર, સહાનુભૂતિ અને સેવાના ગુણોનો વિકાસ થાય છે.

શિવાજી, મહાત્મા ગાંધીજી, લોકમાન્ય તિલક વગેરે મહાન પુરુષોના જીવન ઘડતરમાં પણ માતાનો ફાળો વિશેષ રહેલો હતો. આથી જ કહેવાય છે કે એક સંસ્કારી માતા સો શિક્ષકોની ગરજ સારે છે. મા વિનાનો સંસાર ગોળ વિના ના કંસાર જેવો હોય છે.જગતમાં સર્વપ્રથમ અને બાળકના મુખમાંથી નિકલતો પ્રથમ જો શબ્દ હોય તો તે મા છે.

કવિઓએ માતૃપ્રેમ નો મહિમા મુક્ત કંઠે ગાયો અને બિરદાવ્યો છે, કવિ બોટાદકર એ પોતાની કવિતામાં કહું છે કે, "જનનીની જોડ સખી નહી જડે રે લોલ"માતા એ માતા જ છે, પછી આઠ બાળકોની માતા હોય કે એક સંતાનની. માતાને મન તેનું પ્રત્યેક બાળક કાળજા

નો કટકો હોય છે. માતા ગરીબ ઘરની હોય કે શ્રીમંત ઘરની એના વાત્સલ્યનું ઝરણું વહ્યા જ કરે છે. વળી બાળકો હષ્ટપુષ્ટ અને દેખાવડો હોય એ જરૂરી નથી માતાને મન તો એનું લુલુ લંગડું કે બહેરુ બોબડુ બાળક પણ ગુલાબ ના ગોટા જેવું જ હોય છે. માતા પોતાના સંતાનોને પોતાના જીવથી પણ વધારે પ્રેમ કરે છે

માતાને ઘડીને ઈશ્વરે હાથ ધોઈ નાખ્યા છે એમ કહીએ તો જરાય ખોટું નથી.એટલે જ કહેવાયુ છે ને "નારી તુ નારાયણી"

આખા જગતનો આધાર માતાની આગળી છે.એની આંગળી અભય છે. સામે વાઘ આવીને ઊભો હોય તો પણ દીકરાએ જો માની આંગળી પકડી હશે તો એને બીક નહીં લાગે. એની આંગળી નિર્ભય છે. મા શબ્દ મમતાથી ભરેલો છે. માની મમતા માત્ર માનવ સૃષ્ટિમાં જ જોવા મળે છે, એવું નથી. પશુ-પંખીઓને પણ પોતાના બચ્યા માટે અનહદ પ્રેમ હોય છે. ચકલી ચણ લાવીને બચ્યા ને ખવડાવે છે. ગાય વાછરડાને જીભ વડે ચાટી પોતાની મમતા બતાવે છે. વાંદરી પોતાના બચ્યાને છાતીએ વળગાડી ફરે છે.જો અબોલા પ્રાણીમાં પણ આટલી માયાને લાગણી હોય, તો માનવ માતા ની તો વાત જ શી કરવી.

એટલે જ કહેવાય છે કે "જનની અને જન્મભૂમિ સ્વર્ગથી પણ ચડિયાતી છે"

જગતમાં દરેક મહાન પુરુષોના જીવન ઘડતરમાં તેમની માતાનો ફાળો અનન્ય અને અનમોલ રહ્યો છે તે બાળકની પ્રેરણા દાત્રી ની છે. નેપોલિયન જેવાને પણ કહેવું પડેલું કે "એક માતા સો શિક્ષકની ગરજ સારે છે" માતા સંતાનના ચારિત્ર ઘડતર કરે છે તે થકી સમાજનું અને રાષ્ટ્રનું ઘડતર થાય છે.

આ મા બનવુ પણ કંઇ સહેલુ નથી કારણ કેપ નવ માસનાં ગર્ભાધાન પછી આખરે પ્રસૂતિની પીડા અને શિશુપાલનની અઢળક જવાબદારી અનેક બલિદાન માંગી લે છે. અને આ બધું એક સંપૂર્ણ નિસ્વાર્થ ભાવના થી માત્ર પોતાના દેવના દીઘેલ માટે.

આ સૃષ્ટિનું સર્જન કર્યા બાદ જ્યારે ઈશ્વરે બઘે સમય ન પહોંચી શકે ત્યારે તેને માનું સર્જન કર્યું છે. કહેવાય છે ને કે આખું જગત એક તરફ અને માની મમતા એક તરફ, ધરતીનો છેડો ઘર અને ઘર નો છેડો માં. બઘે જ ફરીને આવ્યા બાદ સાચી શાંતિ તો માના ખોળામાં જ મળે. કહેવાય છે ને કે પૈસાથી બધું મળે, હું મારું બધું જ આપી દઉં છું મને મારી

મા મળે?.

માતૃપ્રેમ શબ્દ એ જ સંપૂર્ણ લાગણીથી ભરાયેલો છે. મા બોલતાની સાથે જ મોં પણ ખુલી જાય છે અને જો પુરા જગતની સરખામણી પણ જો મા સાથે કરીએ તો થઈ જાય, પરંતુ મા ની સરખામણી જગતમાં કોઈ સાથે કરવી શક્ય નથી. એટલે જ એક સરસ કહેવત યાદ આવે છે કે, "મા તે મા બીજા બધા વગડાના વા"

આટલું સહન કરીને, પેટે પાટા બાંધીને પુત્રનું જતન કરનાર માતાને ઘડપણમાં જો પુત્ર તરફથી પ્રેમને બદલે તિરસ્કાર, સહારા ને બદલે અપમાન મળે, અને મદદને બદલે કુવચનો સાંભળવા મળે તો એ પુત્રને પુત્ર કહેવો કે પથ્થર. આટલું થવા છતાં માતા કાયમ પોતાના દીકરાને આશીર્વાદ આપતી રહે છે તેથી જ તો કહેવાય છે કે "છોરું કછોરું થાય પણ માતા કુમાતા ન થાય"

અંતે મને થોડીક હિન્દી પંકતિઓ યાદ આવે છે.

"खुदा का दूसरा रूप है माँ
ममता की गहरी झील है माँ
वो घर किसी जन्नत से कम नहीं
जिस घर मे खुदा की तरह पूजी जाती है माँ"

Palak S. Dhobi
196310307017

ARTIFICIAL INTELLIGENCE

Artificial Intelligence is intelligence demonstrated by machines or The ability of a digital computer or computer-controlled robot to Perform tasks commonly associated with intelligence beings.

.Artificial Intelligence in one of the fascinating and universal fields of Computer science which has a great scope in future. Artificial Intelligence holds a tendency to cause a machine to work as a Human. Artificial Intelligence is composed of two words Artificial and Intelligence, where Artificial defines 'man-made' and Intelligence defines "thinking power", hence AI means "a man-made thinking power". Artificial Intelligence exists when a machine can have human-based skills such as learning, reasoning, and solving problems.

Applications of Artificial Intelligence

Personalized Shopping

Artificial Intelligence technology is used to create recommendation engines through which you can engage better with your customers. These recommendations are made in accordance with their browsing

history, preference, and interests. It helps in improving your relationship with your customers and their loyalty to your brand.

AI-powered Assistants

Virtual shopping assistants and chatbots help improve the user experience while shopping online. Natural Language Processing is used to make the conversation sound as human and personal as possible. Moreover, these assistants can have real-time engagement with your customers. Did you know that on amazon.com, soon, customer service could be handled by chatbots?

Fraud Prevention

Credit card frauds and fake reviews are two of the most significant issues that E-Commerce companies deal with. By considering the usage patterns, AI can help reduce the possibility of credit card fraud taking place. Many customers prefer to buy a product or service based on customer reviews. AI can help identify and handle fake reviews.

Autonomous Vehicles

Automobile manufacturing companies like Toyota, Audi, Volvo, and Tesla use machine learning to train computers to think and evolve like humans when it comes to driving in any environment and object detection to avoid accidents.

Benefits of Artificial Intelligence

- With the help of AI, you can create such software or devices which can solve real-world problems very easily and with accuracy such as health issues, marketing, traffic issues,etc.

- With the help of AI, you can create your personal virtual assistant such as Google Assistant, Siri, Cortana, etc.
- With the help of AI, you can build Robots that can work in an environment where the survival of humans can be at risk.
- Artificial Intelligence opens a path for other new technologies, new devices, and new opportunities.

Disadvantages of Artificial Intelligence

Increase in Unemployment: One of the biggest drawbacks of Artificial Intelligence is that AI is slowly replacing a number of repetitive tasks with bots. The reduction in the need for human interference has resulted in the death of many job opportunities. A simple example is a chatbot which is a big advantage to organizations, but a nightmare for employees.

High Cost: The ability to create a machine that can simulate human intelligence is no small feat.

No creativity: A big disadvantage of AI is that it cannot learn to think outside the box.

Husain Memon
216310307044

BACK BENCHERS

"The best brains of the nation may be found on the last bench of the classroom"

- APJ Abdul Kalam

It's time we change our mindset and accept the fact that backbenchers are smart nerds. Being a back bencher is both a joy and a comfort. It is rather a blessing than a curse. One has not to grudge it but enjoy it. Front benchers are puny creatures – either just out of the lap of their mothers or those who have a craze to please the teachers. It is not a respectable place for an honorable boy who wants to stand on his own. He has self-respect. He comes to study not for sycophancy. It hardly means that a back bencher is a shirker. Of course, he has the prerogative, sometimes to do whatever he wants to do when the teacher delivers a sermon or relates a story from his life. The back bencher can make himself free from these whims of his teacher and finish his incomplete work.

"Backbenchers always think about creating their own company while frontbenchers think only about working in big companies"

Sometimes back benchers may be shirkers. If one of them is studious he can lead the others. Otherwise if he is an intelligent boy he

would be appreciated by a sincere teacher as he is better as compared to the other ones. Thus, he gains importance. He has a plus point at the time of supervision either by the teacher or the Principal or a guest or an official. The first volley of questions is asked from the front liners. By the time it is the turn of the back-bencher he becomes cautious and generally wins the point. He has the same advantage when the teacher or the principal enters a noisy class. He is generally saved from being punished.

"Backbenchers may not be the scholars but they are definitely the achievers."

The backbenchers are generally jovial, unimposing, large-hearted students who share many other activities rather than be pedantic. They are the essence-the spirit of hilarious side of the class. In their absence, the class is like a gathering of deputies in the communist party or of slaves listening to their master. The backbencher has the comics and other stories to read. He would lend these to others too. But he alone has the special right of reading these in class. He has just to pose that he is a serious chap looking into the text. It is not only funny but pleasant to be a backbencher.

Being the last bencher will surely not help you to get the best grades but the best memories, which you will always keep in your heart with love and leer. Following are the stirring reasons why being a last bencher is awesome.

- ❖ Backbenchers are likely to get more attention from the professors, classmates and random people enter the class, than the frontbencher for not any obvious reason.
- ❖ The last bench view is always perfect, sitting on the last bench gives precise the best view of the entire classroom, with soothing comfort.
- ❖ Backbenchers are way more productive and creative in terms of time management and extra-curricular skills than the first benchers, due to their active participation in every type of activity during the lectures.
- ❖ There is no restricted vision for the backbenchers; they are free to see anything on the earth during lectures. Whereas, first benchers are limited to the teacher's sight only.
- ❖ Backbenchers are the real champs. They are not just involved in

classroom activities but everything they could do during that time. For instance; eating, sleeping, drawing, texting, social networking, or watching movies.

❖ Last bench people are the one, who creates the best of memories of the time. They got all the laughs, tears, words, and emotions forever, in the form of innocent remembrance.

❖ They are independent learners. If they do not understand the subject's lecture, they find themselves free to read and learn any other subject of their choice at the same time as the lecture.

Palak S. Dhobi
196310307017

QUANTUM COMPUTING

Quantum computing is a rapidly-emerging technology that harnesses the law of quantum mechanics to solve problems too complex for classical computers.

Since the beginning traditional computers, have operated in the binary realm , using bits that represent ones and zeros to calculate and process data. Current computers are limited in their ability because they can only deal with one set of inputs and one calculation at a time. Enter qubits, which are volatile and changeable by nature and responsible for powering quantum computers.

The principle of quantum superposition, qubits can store the values of one and zero at the same time. This gives quantum computer to ability to simultaneously solve multiple calculations, each with multiple inputs. Quantum superposition gives a group of qubits the ability to explore different paths through calculation. When programmed correctly, path leading to incorrect answers are ignored while the correct answer(s) are left highlighted. Thus, quantum computers are expected to be a valuable tool to business because they perform fewer calculations to find solution, which saves time and money. Their power has the potential to be transformative and

disruptive to business because of their power to solve puzzling business questions and tackle other issues like optimizing financial portfolios, training artificial

intelligence, and designing efficient logistics networks. It is also anticipated that quantum computer will transform cyber security.

Quantum computing applications:-

Cyber security: The Quantum threat to cyber security. Quantum computers will be able to solve problems that are far too complex for classical computers to figure out. This includes solving the algorithms behind encryption keys that protect our data and the internet's infrastructure.

Weather forecasting: Quantum computing will serve to benefit weather forecasting on both the local scale as well as on a grander scale for more advanced and accurate warning of extreme weather events, potentially damage annually.

Artificial intelligence: AI is the use of quantum computing for the computation of machine learning algorithms. Quantum Ai can help to achieve results that are not possible to achieve with normal computer.

Raval Umang B.
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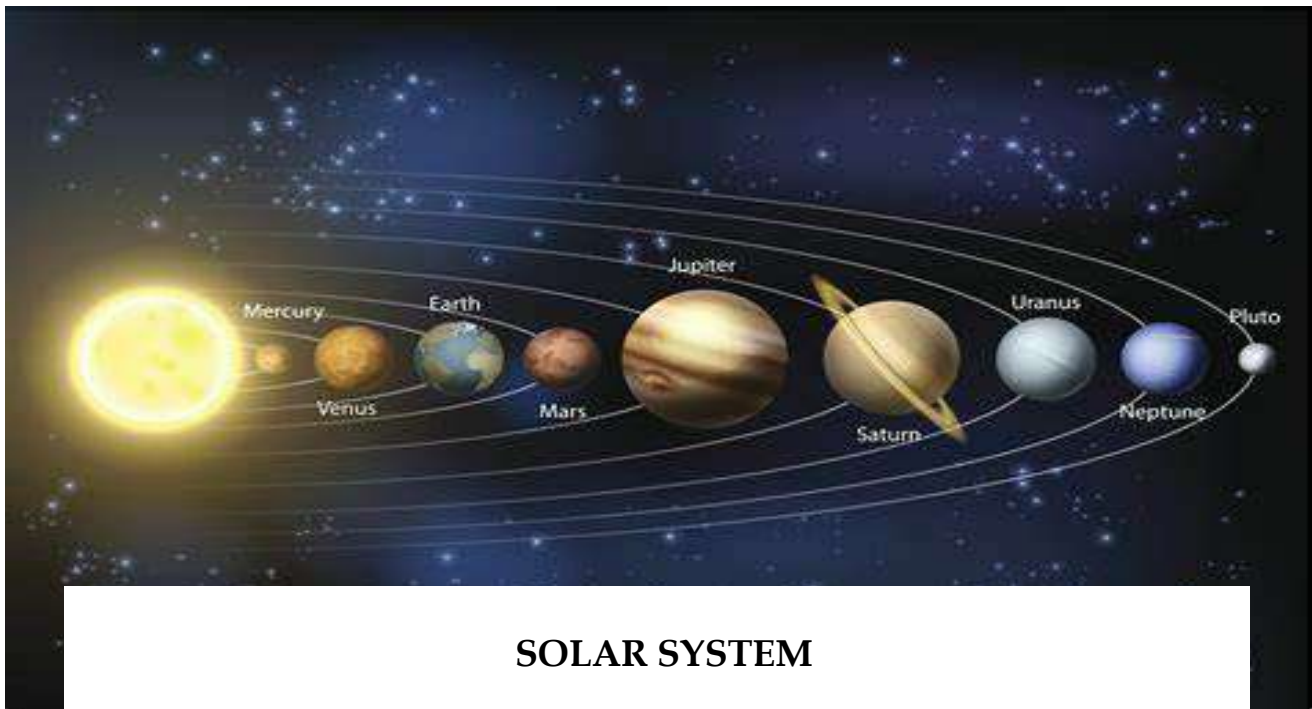
SOLAR SYSTEM

The Solar System is the gravitationally bound system of the Sun and the objects that orbit it. The Solar System formed 4.6 billion years ago from the gravitational collapse of a giant interstellar molecular cloud. The vast majority of the system's mass is in the Sun, with most of the remaining mass contained in the planet Jupiter. The four inner system planets —Mercury, Venus, Earth and Mars—are terrestrial planets, being composed primarily of rock and metal. The four giant planets of the outer system are substantially larger and more massive than the terrestrials. The two largest, Jupiter and Saturn are gas giants, being composed mainly of hydrogen and helium; the next two, Uranus and Neptune, are ice giants, being composed mostly of volatile substances with relatively high melting points compared with hydrogen and helium, such as water, ammonia and methane. All eight planets have nearly circular orbits that lie close to the plane of the Earth's orbit, called the ecliptic.

There are an unknown number of smaller dwarf planets and innumerable small Solar System bodies orbiting the Sun. Six of the major planets, the six largest possible dwarf planets, and many of the smaller bodies are orbited by natural satellites, commonly called "moons" after the Moon. Two natural satellites, Jupiter's moon Ganymede and Saturn's moon Titan, are larger but not more massive

than Mercury, the smallest terrestrial planet, and Jupiter's moon Calisto is nearly as large. Each of the giant planets and some smaller bodies are encircled by planetary rings of ice, dust and moonlets. The asteroid belt, which lies between the orbits of Mars and Jupiter, contains objects composed of rock, metal and ice. Beyond Neptune's orbit lie the Kuiper belt and scattered disc, which are populations of objects composed mostly of ice and rock.

The word solar means "pertaining to the Sun", which is derived from the Latin word sol, meaning Sun. The Sun is the dominant gravitational member of the Solar System, and its planetary system is maintained in a relatively stable, slowly evolving state by following isolated, gravitationally bound orbits around the Sun. The astronomical unit [AU] (150,000,000 km; 93,000,000 mi) would be the distance from the Earth to the Sun if the planet's orbit were perfectly circular. For comparison, the radius of the Sun is 0.0047 AU (700,000 km; 400,000 mi). Thus, the Sun occupies 0.00001% (10^{-5} %) of the volume of a sphere with a radius the size of Earth's orbit, whereas Earth's volume is roughly one millionth (10^{-6}) that of the Sun. Jupiter, the largest planet, is 5.2 astronomical units (780,000,000 km; 480,000,000 mi) from the Sun and has a radius of 71,000 km (0.00047 AU; 44,000 mi), whereas the most distant planet, Neptune, is 30 AU (4.5×10^9 km; 2.8×10^9 mi) from the Sun. With a few exceptions, the farther a planet or belt is from the Sun, the larger the distance between its orbit and the orbit of the next nearer object to the Sun. For example, Venus is approximately 0.33 AU farther out from the Sun than Mercury, whereas Saturn is 4.3 AU out from Jupiter, and Neptune lays 10.5 AU out from Uranus. Attempts have been made to determine a relationship between these orbital distances, like the Titius–Bode law and Johannes Kepler's model based on the Platonic solids, but ongoing discoveries have invalidated these hypotheses.

The Solar System formed 4.568 billion years ago from the gravitational collapse of a region within a large molecular cloud. This initial cloud was likely several light-years across and probably birthed several stars. As is typical of molecular clouds, this one consisted mostly of hydrogen, with some helium, and small amounts of heavier elements fused by previous generations of stars. As the region that would become the Solar System, known as the pre-solar nebula, collapsed, conservation of angular momentum caused it to rotate

faster. The Centre, where most of the mass collected, became increasingly hotter than the surrounding disc. As the contracting nebula rotated faster, it began to flatten into a protoplanetary disc with a diameter of roughly 200 AU (30 billion km; 19 billion mi) and a hot, dense proto star at the Centre. The planets formed by accretion from this disc, in which dust and gas gravitationally attracted each other, coalescing to form ever larger bodies. Hundreds of proto planets may have existed in the early Solar System, but they either merged or were destroyed or ejected, leaving the planets, dwarf planets, and leftover minor bodies.

Kashish Jansari
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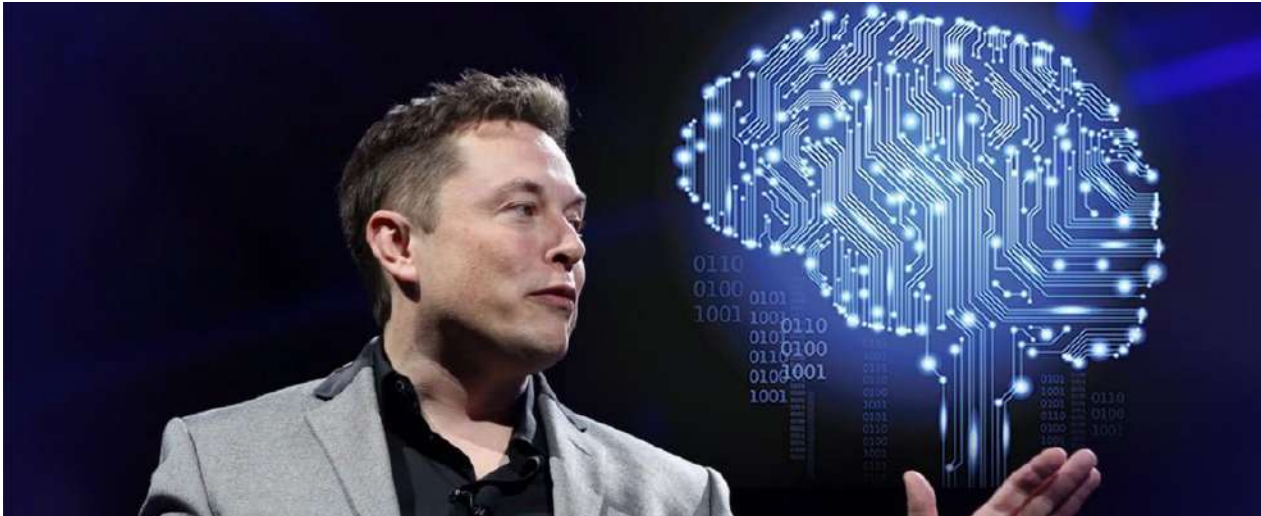
ELON MUSK'S NEURALINK

Normal humans use 10% of their brain in their whole life. In this 10% usage of brain humans invented many complicated technologies like AI (artificial intelligence), sci-fi Robot, humans reach to moon and next 3 years humans land to mars.

What if humans can control 100% of their brain's sound?

looking impossible. But it is possible in next year's Elon musk's company Neuralnik try to make Neuralink Chip that chip control humans' brain and this chip can unlock many parts of humans' brain?
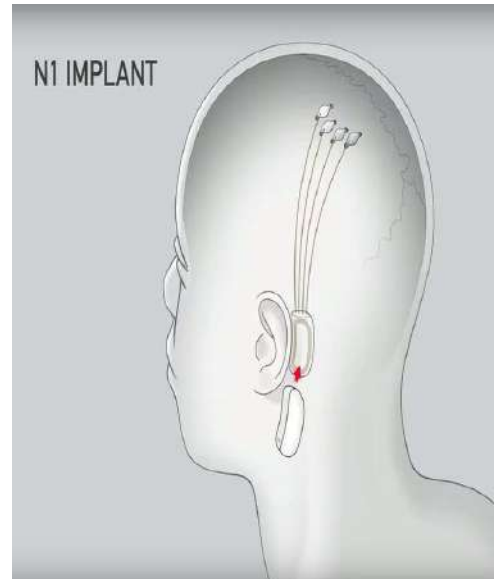
About Neuralink

Neuralink is Musk's neural interface technology company. It's developing a device that would be embedded in a person's brain, where it would record brain activity and potentially stimulate it. Musk has compared the technology to a "Fit-Bit in your skull."

Neuralink chip

Neuralink is developing two bits of equipment. The first is a chip that would be implanted in a person's skull, with electrodes fanning out into their brain.

The chip Neuralink is developing is about the size of a coin and would be embedded in a person's skull. From the chip, an array of tiny wires, each roughly 20 times thinner than a human hair, fan out into the patient's brain.

The wires are equipped with 1,024 electrodes that can monitor brain activity and, theoretically, electrically stimulate the brain. This data is transmitted wirelessly via the chip to computers, where researchers can study it.

The chip size is about a coin size, therefore, it's very complicated to fit into the brain, therefore, Nueralink makes the robot inject chips into the human body.

Nueralink-chip in animals' brain

Neuralink went a step further with its animal demos in April 2021, when it showed off a monkey playing video games with its mind.

Neuralink released a video of a macaque monkey named Pager playing video games such as "Pong" for banana-smoothie rewards. (Video-Link)

Pager played the games using a joystick that was disconnected from the games console, meaning he was controlling the cursor using his brain signals as his arm moved.

Prajapati Shailesh
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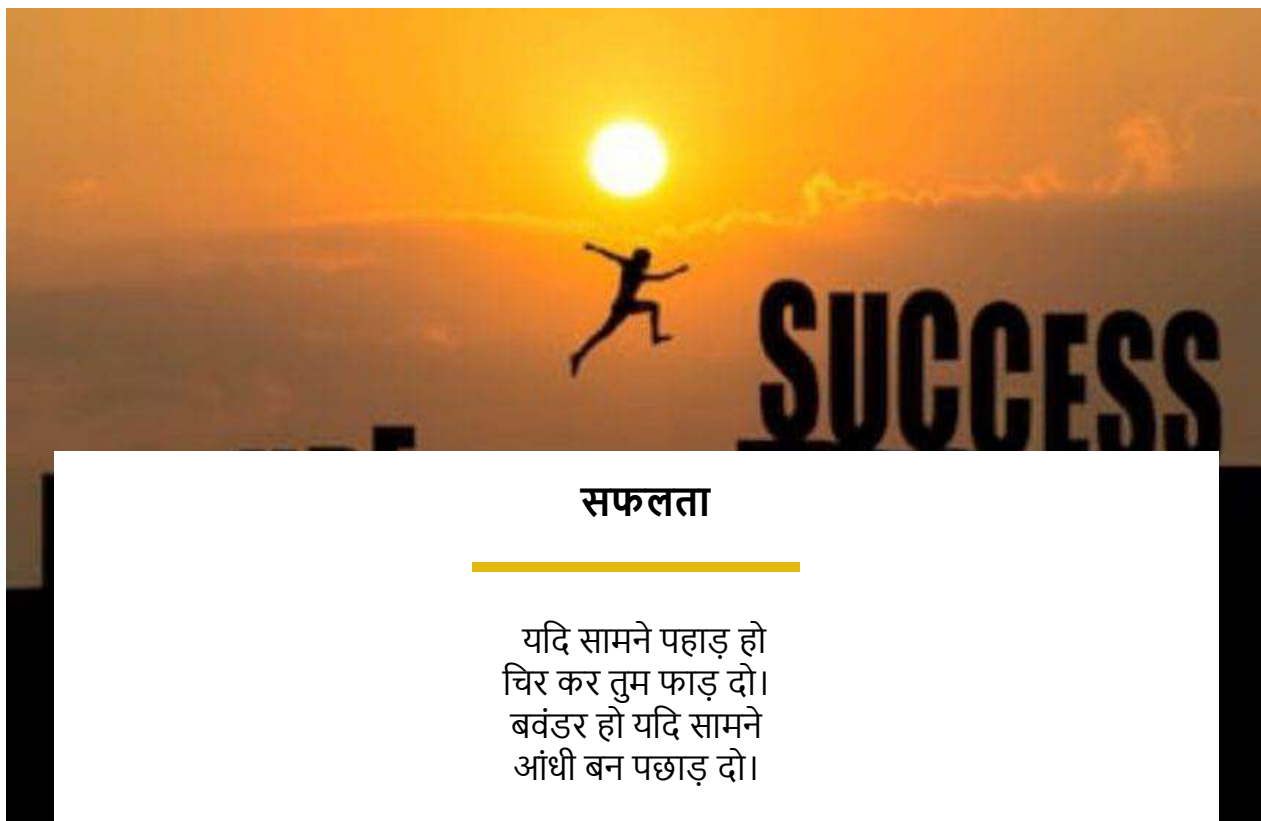
सफलता

यदि सामने पहाड़ हो
चिर कर तुम फाड़ दो।
बवंडर हो यदि सामने
आंधी बन पछाड़ दो।

राह में मुश्किल नहीं
कहीं दिशा तो ग़लत नहीं।
सबकुछ तेरी मर्ज़ी का हो
इस बात में तेरा हित नहीं।

मुश्किल को तु सीढ़ी बना,
एक एक कदम आगे बढ़ा।
शिखर जिस दिन सर करे,
पहले तु शिर अपना झुका।

सफलता जो अहंकार दे
अब उसको तु नकार दे।
ज्ञान हे वही सही,
विनय को जो आधार दे।

सफलता को टिकाना हे,
तो खुद को तुझे तपाना हे।
कुछ सीखने की चाह को
हर क्षण तुझे जगाना हे।

Satishkumar D Prajapati
Lecturer, Computer Engg.

મારી 126 વર્ષની ઉંમરનું રહસ્ય: સ્વામી શિવાનંદ

વારાણસી મા રહેતા 126 વર્ષના સ્વામી શિવાનંદે હમણાં રાષ્ટ્રપતિના હસ્તે પદ્મશ્રી અલંકાર સ્વીકાર કર્યો હતો. એમની તાજગી જોઈને બધાને નવાઈ લાગી બધાને જાણવાની ઈચ્છા હતી કે સ્વામી કેવી રીતે આટલી ઉંમરે પણ નિરોગી રહ્યા. વિશ્વ આરોગ્ય દિવસ પર બાલબ્રહ્મચારી સ્વામી શિવાનંદે જણાવ્યું કે કેવી રીતે તેઓ આટલી ઉંમરમાં પણ નિરોગી રહે છે કેવી રીતે યોગ અને પ્રાણાયામથી આટલું સરસ જીવન વિતાવી રહ્યા છે.

તેમણે કહ્યું કે હું આજે પણ સંપૂર્ણ રીતે નીરોગી છું ક્યારે પણ બીમાર પડ્યો નથી નાનપણથી જ યોગ કરી રહ્યો છું યોગ કરવાથી અનિદ્રા અને તણાવ ભાગી જાય છે નિયમિત પ્રાણાયામ કરું છું.યુવાનોએ જીવનમાં યોગનું મહત્વ આપવું જોઈએ.તેઓ રોજ સવારે ત્રણ વાગે ઊઠે છે ઠંડા પાણીથી આંખો જુએ છે દૈનિક કાર્ય પૂર્ણ કરે છે ઋતુ પ્રમાણે ઠંડા તેમ જ ગરમ પાણીથી સ્નાન કરે છે. એક કલાક ફરવા જાય છે ત્યાર પછી આસન યોગાસન કરે છે ત્યાર પછી ચંડીપાઠ કરે છે બપોરે એક વાગ્યે ભોજન કરે છે તેમાં તેલ મીઠા વગરની ઉકાળેલી શાકભાજી અને દાળ ખાય છે ક્યારેક સિંધવ મીઠું લે છે દિવસે સુતા નથી સાંજે રોજ સ્નાન કરે છે.

ભોજનમાં જવથી બનાવેલ દરિયા, બટેટાના ઓખા ,ઉકાળો અને શાકભાજી.જમીને રાત્રે 9 વાગ્યે સૂઈ જાય છે પોતાનું કામ તેઓ સ્વયં કરે છે પોતાના વાસણ કપડા પણ જાતે ધુએ છે પોતાના નિવાસ ની સફાઈ પણ જાતે જ કરે છે ક્યારેય નિશાળમાં જઈ શક્યા નથી પરંતુ હિન્દી અંગ્રેજી અને બંગાળી ભાષા બોલી શકે છે તેઓ ત્રણ આસન રોજ કરે છે. સર્વાંગાસન
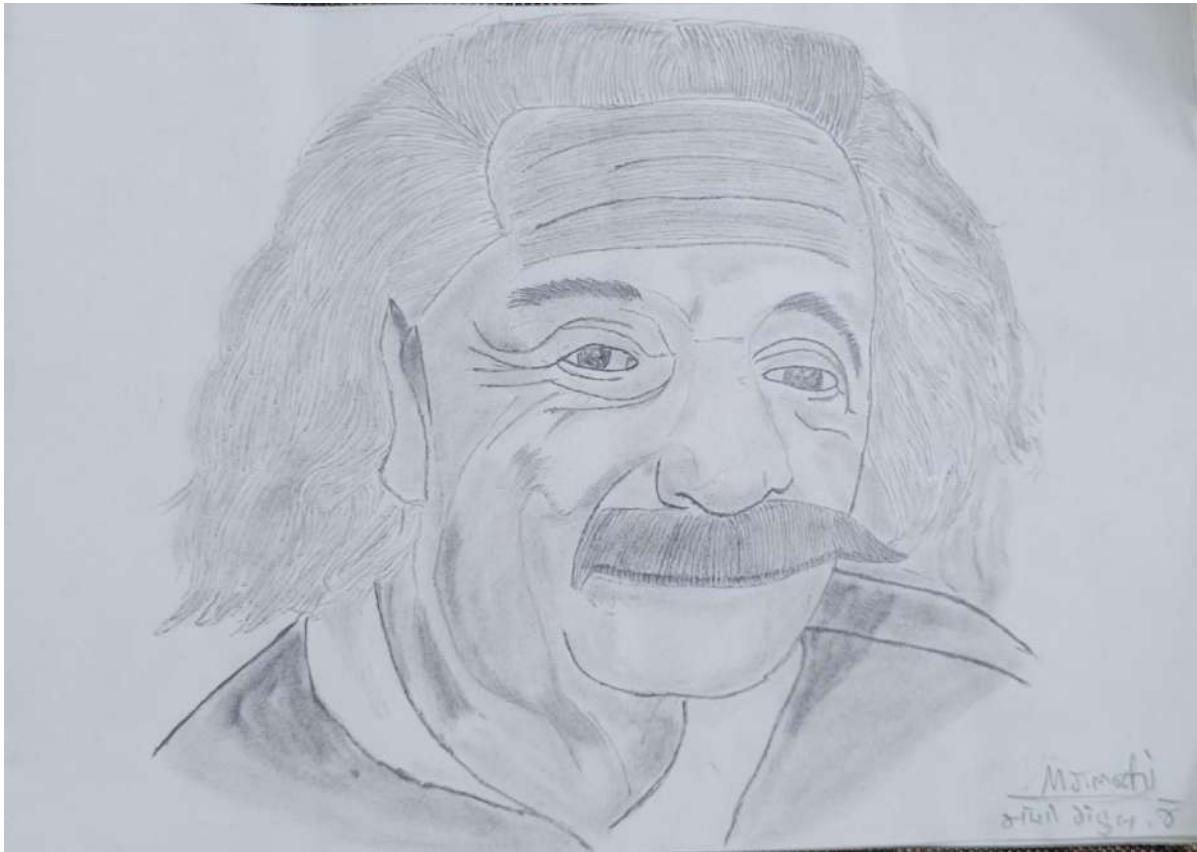
જેનાથી થાઈરોઈડ થયો હોય તો દૂર થઈ જાય છે પવનમુક્તાસન કરવાથી પેટની સમસ્યા દૂર થાય છે વજ્રાસન ભોજન કર્યા પછી આસન કરવાથી પાચનની સમસ્યા રહેતી નથી.

નો ડિઆયર

નો ડિપ્રેશન જ જીવન મંત્ર છે.

Piyush M. Prajapati
Lecturer, Computer Engg.

SKETCH OF ALBERT EINSTEIN

SHINING STARS (WINTER -2021)

Diploma Semester 1

Sr. No.	Enrollment No.	Name	SPI
1	216310307105	Raval Shittalben J.	9.52
2	216310307026	Prajapati Shailesh M.	9.1
3	216310307006	Patel Maharshi C.	8.9

Diploma Semester 3

Sr. No.	Enrollment No.	Name	SPI
1	206310307095	Vyas Vishva P.	9.55
2	206310307094	Thakkar Aayushi M.	9.16
3	206310307014	Rana Kishan P.	9

Diploma Semester 5

Sr. No.	Enrollment No.	Name	SPI
1	196310307577	Thakor Rameshji K.	9.83
2	196310307517	Gohil Rahulkumar R.	9.77
3	196310307025	Jansari Srushti P.	9.53

PAPER PUBLICATION

Paper Presented:

Paper Title	Name of Faculty	Jornal	Paper Level	Date Of Publication
Container Scheduling Algorithm In Docker Based Cloud	Jigna. N. Acharya	Jornal(Webology) (ISSN: 1735-188X)	International	2022

Paper Abstract:

In last few years, Docker container is used as light weight virtualization for building infrastructure as a service of cloud computing. Container placement on machines is traditional scheduling problem in docker based cloud. Docker supports default scheduling strategy called spread strategy. Its main objective is to place containers on each and every machine available in docker cluster. However, spread strategy does not consider load of machines. So, it leads to overloading or under loading of machines as

well as not proper utilization of resources. In this paper, we proposed new scheduling algorithm that consider CPU usage of every machine in the docker cluster. To choose the most appropriate machine to place containers needed to be allocated in scheduling process, author define method for CPU utilization of every machine and select machine with minimum CPU utilization value for container placement. The experiment results shows that our scheduling algorithm use minimum number of machines in docker cluster as well as proper utilization of resources as compared to spread strategy.

DEPARTMENT ACTIVITIES

PROJECT FAIR – 2022

K.D Polytechnic Computer Department organized Project Fair 2022 on 30 March 2022 at LRUC building computer department. All students of 6th semester participated in the event. Total 24 groups of students showcased their working project to all the faculties of computer department.

To encourage students for their efforts and to motivate all students' prizes were distributed. Evaluations of projects were done by the evaluators (faculties of computer department).The Winning Project is Job card &Service history management.

Winner Team members Thakor Rameshji Kuvarji, Gohil Rahulkumar Rasikbhai, Jansari Srushti Pravinkumar and Darji Mallika Sunilkumar received Certificate from our Honorable Head of Department Shri. J.M.Joshi.

Expert Lectures

Mr. Vijay Patel ,Trainer at Zorens, Patan delivered expert Lecture on Full Stack Web Development **21/01/2022**. 97 Students of the Computer Engineering Department Attended this Session. Main Goal of this lecture is to educate students for industry related web development.
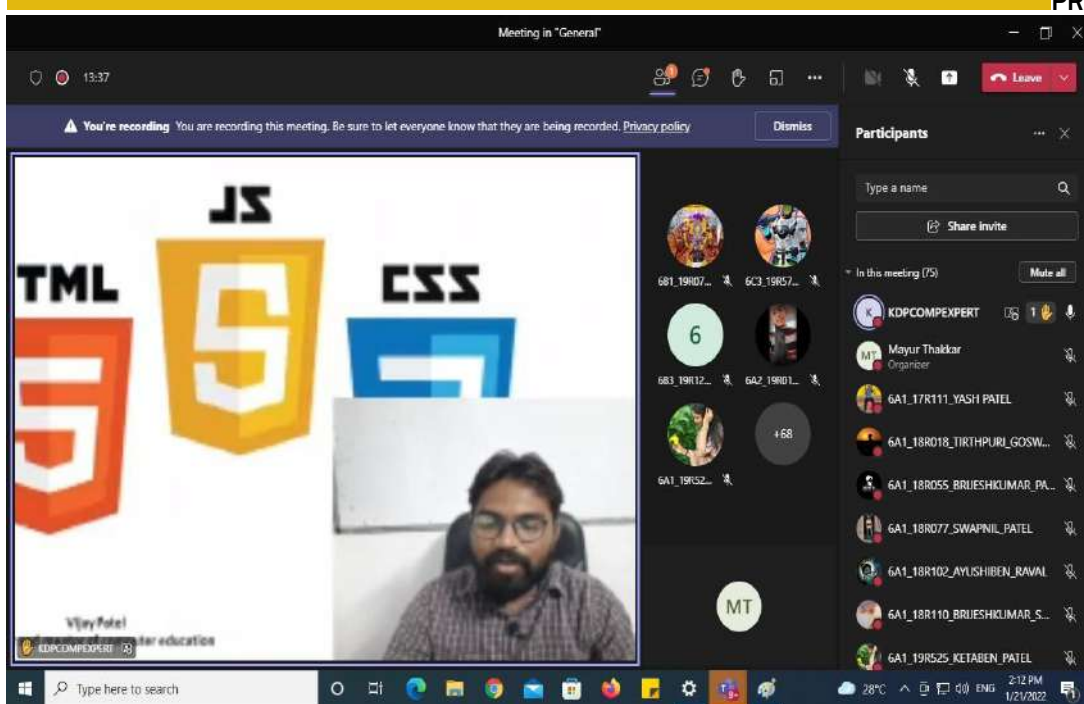
Dr.Jayesh N Modi, Assistant Professor, Department of Computer Science, HNGU, Patan delivered expert Lecture on Network Security on 04/02/2022. 89 Students of Computer Engineering Department Attended this Session.
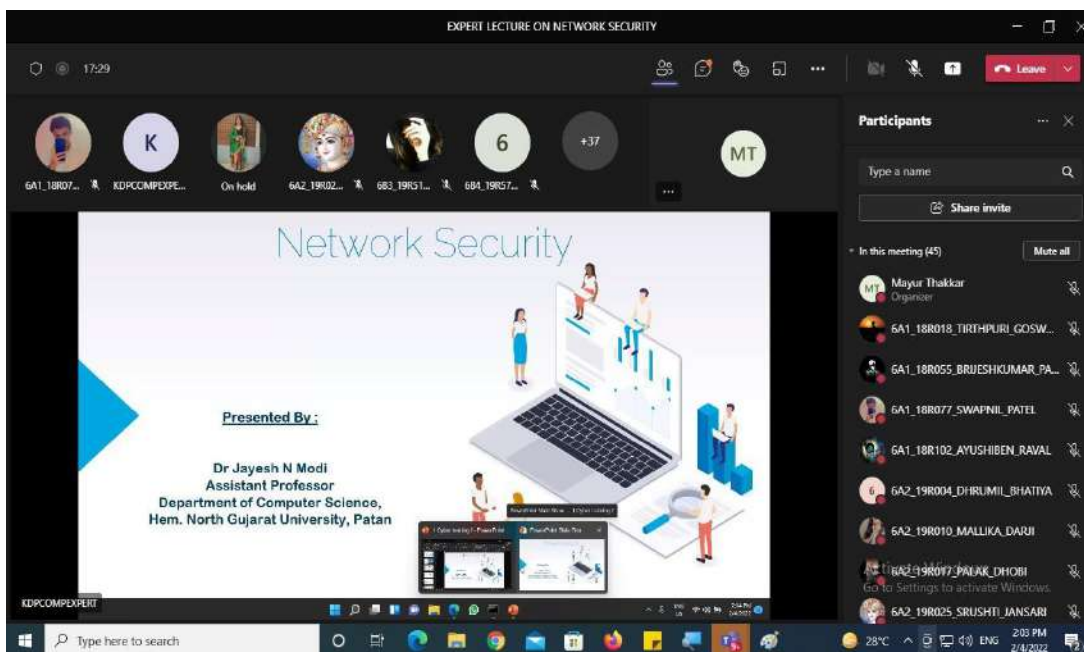
Team Computer Department

Sr. No.	Name	Designation
1	Shri J. M. Joshi	H.O.D. (M. Tech)
2	Smt. A. M. Mevada	Lecturer (B. E.)
3	Smt. P. R. Sharma	Lecturer (B. E.)
4	Shri C. D. Patel	Lecturer (M. E.)
5	Smt. J. N. Acharya	Lecturer (M. E.)
6	Smt. R. K. Vaghela	Lecturer (M. E.)
7	Shri P. J. Joshi	Lecturer (B. E.)
8	Smt. B. I. Saini	Lecturer (M. Tech)
9	Shri M. R. Thakkar	Lecturer (M. E.)
10	Shri N. A. Patel	Lecturer (M. Tech)
11	Shri S. D. Prajapati	Lecturer (M. E.)
12	Shri K. D. Prajapati	Lecturer (B. E.)
13	Shri P. M. Prajapati	Lecturer (M. Tech)
14	Shri K. M. Madhu	Lecturer (M. E.)
15	Shri Shyju Raju	Lecturer (M. E.)
16	Smt. N. J. Patel	Lecturer (M. Tech)
17	Shri D.R.Dodiya	Lecturer (B. E.)
18	Shri Y. R. Patel	Lecturer (M. E.)
19	Shri M. C. Thakore	Lecturer (M. Tech)

" One child, one teacher, one book, one pen can change the world." –
Malala Yousafzai

Article Contributors

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Jansari Kashish A.	Student Contributor
Husain Memon	Student Contributor
Prajapati Shailesh	Student Contributor
Patel Shreya J.	Student Contributor
Raval Umang B.	Student Contributor

Team PRAWAH

Smt. B. I. Saini
Shri P. J. Joshi
Shri M. R. Thakkar
Shri K. M. Madhu
Smt. N. J. Patel
Shri Y. R. Patel

Contact us: teamprawah@gmail.com