

# **TECHERALD**

BCA Dept. Newspaper









### EMPOWERING STUDENTS FOR FUTURE CAREERS IN CLOUD COMPUTING (AWS)

-By Hari Charan V (5th sem BCA-B)

On March 27, 2024, the Department of BCA conducted an enlightening orientation session on the AWS re/Start Internship for the VI semester students of the 2021 BCA Batch. The event took place from 1:30 PM to 3:00 PM at the 4th Floor Seminar Hall and aimed to equip students with knowledge and insights to build successful careers in the field of cloud computing.

The main highlight was a comprehensive presentation on the AWS re/Start program, delivered by Mr. Babu Rao E, which outlined the program's focus on developing technical skills, enhancing career readiness, and empowering students through practical education.

Participants were introduced to the Magic Bus India Foundation by Faheem, who shared insights on the foundation's collaboration and its role in fostering educational growth. This was followed by a technical session on AWS cloud computing led by Nanda Kumar, providing students with a hands-on overview of AWS tools and core services.

The orientation proved to be an invaluable experience, reinforcing the Department of BCA's commitment to enhancing student career prospects through quality training and industry exposure.

#### GLOBAL EDUCATION AWARENESS PROGRAM





The Seminar aimed to increase awareness and access to quality education worldwide, particularly in underserved communities. Targeting VI BCA students, it covered key topics such as the importance of pursuing a master's degree for career enhancement, research, and critical thinking skills. The benefits of international education were highlighted, emphasizing the academic and cultural exposure gained from studying abroad. The seminar also discussed the industry relevance, technical expertise, and international recognition of MCA and MBA qualifications. Interactive sessions and a Q&A segment fostered active participation, making the seminar dynamic and engaging. The conclusion underscored the transformative impact of pursuing a master's degree, particularly in fields like computer science, for career and personal growth.

#### **GENERATIVE AI**





On May 27, 2024, a seminar on Generative AI was held at St. Francis College for 100 fourth-semester BCA students, organized by Rubixe and led by speaker Ramkumar. The seminar aimed to provide a comprehensive understanding of Generative AI, covering its fundamental concepts, applications, and recent advancements.

Key topics included the basics of generative models, their applications in fields like art generation, text-to-image synthesis, voice synthesis, and drug discovery, and emerging trends such as self-attention mechanisms and large-scale models. Interactive sessions and a Q&A segment fostered active participation, allowing attendees to engage deeply with the content. The seminar concluded with a discussion on the ethical considerations of deploying generative models, leaving participants with valuable insights and inspiration for further exploration in artificial intelligence.

#### ORIENTATION ON INTERNET OF THINGS AND AWS CLOUD COMPUTING

On April 3, 2024, an orientation on the Internet of Things (IoT) and AWS Cloud Computing was held at the 4th Floor Seminar Hall, attended by 94 participants. The event, organized for IV semester students, began with an introduction by Ms. Shreya and a welcome address by Ms. Mandira. Resource persons Mr. Muhammed Mubashir and Ms. Deeptha from Techbyheart led the first session on AWS Cloud Computing, covering cloud infrastructure, deployment models, and key AWS services.



The second session, conducted by Mr. Shahsad, a Robotics Engineer, focused on IoT fundamentals, sensor networks, data analytics, and real-world applications. The program concluded with a vote of thanks by Mr. Abhishek A, highlighting the valuable insights gained into cutting-edge technologies and their applications in computer science.

#### ORIENTATION ON 3-DAY WORKSHOP ON MACHINE LEARNING USING PYTHON



On April 29, 2024, the Department of BCA organized an orientation for a three-day workshop titled "Machine Learning Using Python" for 100 fourth-semester BCA students. Led by Ms. Farheen Farhath from Prinston Smart Engineers, the session aimed to introduce students to the basics of machine learning and Python programming.

Ms. Farheen covered the significance of machine learning, its applications in various industries, and the fundamentals of Python, including key libraries like NumPy and Pandas. She highlighted the benefits of attending the workshop, including the opportunity for the top 10 performers to secure internships at her company. Students were provided with registration forms and informed about the workshop fees and dates. The session concluded with positive feedback from students, who appreciated Ms. Farheen's clear explanations and engaging teaching style, and expressed enthusiasm for further exploring machine learning.

#### SCOPE AND OPPORTUNITIES IN VARIOUS IT DOMAINS

On April 29, 2024, the Department of BCA at St. Francis College organized a seminar on "Scope and Opportunities in Various IT Domains" for VI semester students, featuring Ms. Farheen Farhath from Prinston Smart Engineers. The seminar aimed to provide insights into different IT domains and their career prospects.

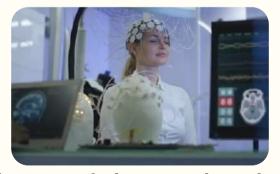
Ms. Farheen, an expert in the IT industry, covered various domains, including Software Development, Data Science and Analytics, Cybersecurity, Cloud Computing, Artificial Intelligence and Machine Learning, Internet of Things (IoT), and DevOps. She discussed current market trends, career opportunities, essential skills, and qualifications required for success in each domain. The seminar also included real-world examples and success stories, highlighting innovative projects in the IT industry. An interactive Q&A session allowed students to clarify doubts and gain further insights. The seminar concluded with a vote of thanks, leaving students inspired to explore and pursue rewarding careers in the IT field.



### TECH FACT

The average cost of a Data Breach in 2024 has risen to over ₹371,211,970,800, according to IBM's annual report. The costs are not just financial but also reputational, and businesses may lose customer trust permanently.

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The concept of a dream recorder—a device that can record and play back dreams—has fascinated both scientists and the public for years. The recent advancements in Japan suggest that researchers are making significant strides toward this goal by merging Artificial Intelligence (AI) and brain imaging technologies like Electroencephalography (EEG).

The research into dream recording technology is primarily led by several researchers Computational Neuroscience Laboratories in Kyoto, guided by Professor Yukiyasu Kamitani. technology uses a modified MRI machine to identify brain activity patterns during REM (Rapid Eye Moment) sleep. It employs a sophisticated interface that connects directly to the human brain with an electroencephalography sensor conveniently placed on user's head, the dream recording device can read and map brain activity. It then reads the brain signals, decoding it by AI algorithms creating a visual representation of what the user is seeing during their sleep. It can predict the dream's content up to 70% accuracy. . This groundbreaking innovation combines advancements in AI and brain imaging to explore the mysterious world of dreams.

# BRAIN-COMPUTER INTERFACE: UNLOCKING NEW FRONTIERS IN COMMUNICATION AND CONTROL

-By Jaisheela, Kalpana (3rd Sem BCA-B)

A Brain-Computer Interface (BCI) is a system that determines the functional intent - the desire to change, move, control, or interact with something in your environment - directly from your brain activity. In other words, BCIs allow you to control an application or a device using only your mind. BCI skips the need to voluntarily control your muscles to interact with devices around you. The computer replaces the execution of a physical movement, instead translating your desired action and controlling the device directly.



The most impactful use of BCI technology would be in the healthcare sector, where it has become a crucial aid for people who are paralysed or people with neurodegenerative diseases. BCI systems allow such individuals to spell out words, or control robotic arms, enabling them to communicate and interact with their environment. In addition to enabling communication and control for people with disabilities, BCIs are also researched as tools for mental health support. The ongoing studies are researching how this technology can alleviate depression and anxiety. The Gaming and the Entertainment sectors are exploring new ways to create an immersive experience for its users. BCI technology faces challenges such as ensuring the safety and reliability of the neural implants and privacy. However, with further advancements, this technology could be a boon to humankind.

The BCI system works by capturing your brain's electrical signals from the brain through non-invasive electroencephalography (EEG) or invasive neural implants.BCIs look for patterns that occur in brain activity in response to certain external events or stimuli, or that are generated during certain cognitive processes. These patterns are typically neurophysiological phenomena that have been well-documented and studied by neuroscientists and doctors. These signals are then decoded by algorithms that interpret the brain's intent and translate it into commands for the external device.

# FROM LAUNCH TO LANDING: SPACEX STARSHIP FLIGHT 5 SETS NEW STANDARDS IN SPACE EXPLORATION

-By Albin Thomas (5th Sem BCA-B)



On October 13, 2024, SpaceX reached a major milestone with its Starship Flight 5. Launched from the Starbase facility in Texas, this test marked the first time SpaceX successfully landed its massive Super Heavy Booster by catching it mid-air using "chopsticks"—large mechanical arms on the launch tower. This innovative landing technique allows for quick reusability by returning the booster to the launch site instead of an offshore platform, which can improve the efficiency of future launches and turnarounds.

During the mission, Starship achieved a suborbital altitude of 212 kilometres, where it effectively tested new heat shield upgrades designed to improve durability during re-entry. This attempt, featuring modifications in thermal protection, experienced better re-entry conditions than earlier flights, suggesting promising advancements for future missions. Starship then executed a controlled splashdown in the Indian Ocean, successfully meeting its secondary goal of a precise landing on target.

#### MICROSOFT'S POTENTIAL MOVE TO INVEST IN BITCOIN

By Mohammed Rayan A (3rd sem BCA-B)

Microsoft has long explored blockchain, especially through enterprise solutions like Azure Blockchain, and recent speculation suggests that the company may consider investing in Bitcoin as a corporate asset. While Microsoft hasn't confirmed anything officially, investing in Bitcoin could align with other tech giants exploring alternatives to traditional assets. Despite Bitcoin's notorious volatility, it could serve as a hedge against inflation and diversify Microsoft's already strong investment portfolio.



An Investment in Bitcoin would reinforce Microsoft's image as a forward-thinking tech leader and could also drive more institutional adoption of cryptocurrency across various sectors. If this happens, it could serve as significant validation for cryptocurrency and encourage other companies to consider digital assets in their financial strategies. This potential move aligns with Microsoft's interest in Web3 and digital finance, hinting at a deeper commitment to decentralized technology in the future.

# ELON MUSK'S STARLINK TO ENTER INDIA'S TELECOM MARKET FOR ENHANCED WIRELESS CONNECTIVITY



Elon Musk's satellite internet company, Starlink, has ambitious plans for India. As part of SpaceX, Starlink aaims to provide high-speed, low-latency internet to remote and underserved areas across the country. This aligns with Musk's vision of closing the digital divide by using satellite technology to reach areas where traditional broadband and cellular networks struggle.

Starlink's entry could disrupt the telecom market by competing with established players like Jio and Airtel, especially in rural India. Through a vast network of low-earth orbit (LEO) satellites, Starlink plans to deliver reliable, fast internet, potentially opening up economic opportunities and enhancing accessibility for millions.

After meetings with Prime Minister Modi, Musk expressed enthusiasm about launching Starlink in India, noting the country's progressive policies and support for innovation. His next visit, possibly in 2024, is expected to further solidify Starlink's role in transforming rural connectivity in India.

While regulatory approvals are still pending, the potential benefits in education, telemedicine, and remote work make Starlink's arrival a highly anticipated development in the Indian market.

# FACULTY ACHIEVEMENT

 Ms. Sabitha S has been rewarded with a certificate for completing 7-days Faculty Development Program on "Deep-Learning and Image Processing" from October 21st to 27th 2024. The Program was Organized by R.R INSTITUTE OF TECHNOLOGY ,BENGALURU in ASSOCIATION with MEVI TECHNOLOGIES LLP.



 Ms. Prabha Susy Mathew has been rewarded with a certificate for completing 7-days Faculty Development Program on "Deep-Learning and Image Processing" from October 21st to 27th 2024. The Program was Organized by R.R INSTITUTE OF TECHNOLOGY, BENGALURU in ASSOCIATION with MEVI TECHNOLOGIES LLP.



- Ms. Bhavya C has successfully cleared the UGC NET exam. This notable achievement highlights her dedication and academic excellence.
- Ms. Shivanjali Kesharwani Master Trainer from CDAC and Assistant professor ,St. Francis college ,Bangalore delivered an awareness session on High Performance Computing under AICTE Sankalp at Department of Information Science and Engineering, BNMIT college , Bangalore On 5th July 2024.it was a 3 hrs. session, in which about 75 participants including faculty and students from various colleges attended the program.
- Faculty Excellence Recognized through SWAYAM Certification

We are delighted to celebrate the remarkable accomplishments of our esteemed faculty members who have successfully completed the SWAYAM certificate courses in various subjects. SWAYAM, an initiative by the Government of India, is aimed at enhancing access, equity, and quality in education by providing top-tier learning resources to all, especially the underprivileged.

This achievement underscores the dedication of our faculty towards continuous learning and professional growth. Special recognition goes to:

Ms. Sabitha S (HOD), Ms. Prabha Susy Matthew, Ms. Soumya Unnikrishnan, Ms. Bhargavi Jagadish, Ms. Ashita Priyadharshini, Dr. Geetha, Ms. Mary Stella F, Ms. Bharathi G R, Ms. Soniya Joseph, Ms. Bhavya C, Ms. Shivanjali Kesharwani, Ms. Anu L.

Their commitment to upskilling and contributing to academic excellence is an inspiration to both students and fellow educators. We take immense pride in their dedication and congratulate them on this outstanding achievement!





### You'll need the following parts:

- 1.CPU The processor, choose one based on your needs (gaming, productivity)
- Motherboard The main board, make sure it's compatible with your CPU, RAM, and GPU. 2. Motherboard -
- 3.RAM 16GB is a good starting point for most users.
  4.GPU Essential for gaming or graphic-intensive tasks. Optional if using integrated graphics.
- 5.Storage SSD for speed, HDD for capacity (many use both).
- 6. Power Supply (PSU) Ensure it has enough wattage for your system. 7.PC Case – 7
- The enclosure; it must fit your components.
- 8.Cooling Stock or aftermarket cooler depending on vour needs.
- 9. Operating System Windows or Linux.

### **Select Your** Side!

#### **Team Red V/S Team Blue**

When choosing between Intel (Team Blue) and AMD (Team Red) for your CPU, it comes down to performance needs. Intel is known for strong single-core performance, making it ideal for gaming and tasks that rely on high clock speeds. It also tends to be more power-efficient. AMD, particularly with its Ryzen series, excels in multi-core performance, offering better value for tasks like video editing, rendering, and



#### 1. Install the CPU

- 1. Open the CPU socket on lifting the lever.
- 3. Secure it by lowering the

- 6.Connect the cooler's fan

#### 2. Install RAM

- 1.Open RAM slots



#### 5. Install Storage

the case standoffs.

- 1.Mount SSD/HDD in the case (use tool-less slots or screws).
- 2.Connect SATA cables for data and power cables from the PSU.

#### 8. Power On & Install OS

- 1. Connect monitor, keyboard, and mouse.
- 2. Power on the system. You should see the BIOS/UEFI screen.
- 3.Install your OS (Windows/Linux) from a USB drive.
- 4.Update drivers and install essential software.

#### 6. Install the Graphics Card (GPU)

- 1. Insert the GPU into the PCIe x16 slot.
- 2. Secure the GPU with screws.
- 3. Connect PCIe power cables (if

#### 7. Cable Management & Final Checks

- using cable management holes.
- everything is plugged in securely.





#### STUDENTS WIN RECOGNITION AT "BLAZE THE TRAIL: #SAVINGBLR" EVENT







We are proud to announce that **A. Anthony Pani Vivithan** (3rd Sem BCA - A) and **Chandru S** (3rd Sem BCA - C) have been awarded a certificate and a cash prize of **Rs. 20,000** for their remarkable achievement in the "**Blaze the Trail: #SavingBLR" Ideathon** organized by **News Trail** on **June 29, 2024**. Their team was chosen from among **155 participating teams** for their innovative rainwater purification prototype designed for storage in tanks, aimed at addressing Bengaluru's water crisis.

The event, held in celebration of **World Environment Day**, featured participation from students across **150 institutions** in Bengaluru. In the first stage, teams submitted video presentations proposing solutions to environmental challenges. Out of these, **11 teams** were shortlisted by a jury led by **T. V. Ramachandra** from the **Indian Institute of Science (IISc)** for the final round.

The event was powered by HITACHI "Inspire the Next" and included a panel discussion titled "Thirsty Metropolis: Sustainable Solutions for Water-Secure Namma Bengaluru," moderated by Dr. Ramachandra. The distinguished panel featured Dr. H.K. Ramaraju, Dr. M.A. Khan, and Dr. N. Nandini, who shared insights on sustainable water solutions and the importance of collective action.

The ideathon was supported by partners such as the **Karnataka State Pollution Control Board**, **Bangalore Development Authority**, and several other notable organizations, with IISc Bangalore as the knowledge partner.

#### JEEVAN SMITH SHINES IN COOLULU CLUB SEMI-FINALS

We are proud to share that **Jeevan Smith** from 3rd semester BCA, section C, showcased exceptional talent during his recent performance at the **Coolulu Club.** In a thrilling semi-final match, Jeevan played an outstanding knock, scoring 72 runs off just 52 balls. His impressive batting display was pivotal in securing his team's position and earned him the well-deserved **Man of the Match award**.



#### COLLEGE TEAM SHINES AS RUNNERS-UP IN ST. ALOYSIUS CRICKET TOURNAMENT





On November 6, 2024, St. Aloysius Degree College hosted an exhilarating cricket tournament that featured **16 competitive teams** from various colleges. Our college team demonstrated outstanding performance throughout the event, battling through a series of intense matches to claim the runners-up position.

We extend our heartfelt congratulations to the team members: **Abhishek**, **Dhanush**, **Surya** (WK), **Egnesh**, **Jeevan** (C), **Anish**, **Reegan**, **Rakesh**, **Akbar**, **Rajshekhar**, **Naveen**, and **Karthik** (VC), for their hard work and dedication that led to this remarkable achievement. Your teamwork and spirit made us all proud!

#### III YEAR BCA B TRIUMPHS IN INTERCLASS KABADDI COMPETITION





On October 10, 2024, the **Defending Champions**, **III Year BCA B**, showcased their prowess by securing a commanding victory over III Year BCom Regular in the highly anticipated interclass Kabaddi competition. This win marks a successful defense of their title from the previous tournament and underscores their status as the top team in the college.

The tournament featured **20 teams**, making the achievement by III Year BCA B even more impressive. Despite formidable resistance from III Year BCom Regular, the tactical discipline and experience of BCA B allowed them to maintain control and execute a solid performance in both offense and defense. Their unwavering focus and teamwork were key to their continued dominance.

- Koguru Varshitha 5 th sem BCA B has been awarded with a certificate for completing "Instagram Ads Masterclass: Complete Guide for Instagram Ads" which was conducted by Udemy.
- Christina Mary J 5 th sem BCA B has been awarded with a certificate for completing the course of "Problem Solving For Success" on June 24,2024 by Infosys Springboard

#### **HACKATHON**





A Big Congratulations to all participants and winners of the **Smart India Hackathon** (**SIH**) held on **September 11, 2024**, at St. Francis College, Koramangala! The event was a testament to student innovation and problem-solving skills, featuring **17 teams** competing through two challenging rounds: crafting practical solutions and presenting their ideas with a focus on purpose, investment, and feasibility. The top three teams earned certificates and cash prizes, while ten additional teams, including **four** from the **BCA department**, received consolation prizes and certificates for their dedication. Special recognition goes to:

- Team 1: A Anthony Pani Vivithan, Chandru S, Shrithika Francis, Prasad P, and Daniya Fathima.
- Team 2: Mohammed Rayan A, Sharon Prince Thomas, Aditya Kumar A, Yonus Riyaan Khan, and L Priyan Raj.
- Team 3: Hari Charan V, Asanth B, Albin Thomas, Abhay S Panicker, Komathi, and Devibala.
- Team 4: Anurag Kalita and Clement George Mathew.

Well done to all for their exceptional effort and innovative contributions!

### St. Francis College Applauds Final-Year BCA Students for AWS Certification Success

St. Francis College is proud to highlight the accomplishments of its **final-year BCA students**, who have successfully completed an intensive three-month **AWS internship** during their **6th semester** in **2024**. This program, designed to enhance cloud computing skills, provided students with practical training and deep insights into the field. The internship concluded with comprehensive evaluations through mock tests to gauge each student's proficiency.

We extend our heartfelt congratulations to the following students for earning their "AWS Certified Cloud Practitioner" certification from Amazon Web Services, a globally recognized credential:

Alan John A P Akash Augustien J Benedicta A
Deepak Singh K Dhanushree R Kadali Hrushikesh Ishika Ghosh
Shravan C Syed Ali Mohammed Shengis Khan Vamsi M
Mohammed Jasim Jeelan Diwakar R Shakthi S Shakthi Priya M

This accomplishment not only showcases their commitment and hard work but also underscores the quality of education and professional training at St. Francis College. Achieving the "AWS Certified Cloud Practitioner" certification is a significant milestone, opening doors to various career opportunities in the tech industry and affirming their readiness for real-world challenges.

The AWS internship program at St. Francis College aims to empower students with industry-relevant knowledge, fostering a learning environment that bridges academic concepts with practical applications. We are confident that these certified cloud practitioners will make significant contributions to the evolving world of technology.

## **NEWSPAPER EDITORIAL TEAM (2024 - 2025)**



Sabitha S



D V Visvajit Chandran **Key Contributor** 



**Mary Stella** Faculty Supervisor



**Chandru S** Editor-in-Chief



Hari Charan V **Proof Reader** 



**A Anthony Pani Vivithan** Key Contributor



Asanth B **Key Contributor** 



Abhay S Panicker **Key Contributor** 



**Albin Thomas Key Contributor** 

### **CONTRIBUTORS**



Ms. Bhavya C (Faculty)



Ms.Shivanjali (Faculty)



Vaibhavi.M







Jayashree V S



Nishchitha M



Y S Karthik Siddharaj



Markleeng keishamba



Samiksha Mukund





Princika B



Rashmi V C



**K.Bosh** 



Tahiya Shoukath



**B Pradeep Kumar** 



## TOPPERS CORNER (BATCH 2021-2024)





Dhanushree R **CGPA 9.77** 



Akash Kumar Maurya **CGPA 9.32** 



M Surya **CGPA 9.17** 



Sahil Rajesh **CGPA 9.17** 



## 3RD SEMESTER TOPPERS





Koguru Varshitha SGPA:9.88 CGPA:9.75



Dikshitha C SGPA:9.83 CGPA:9.63

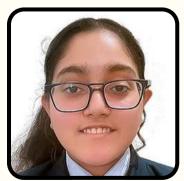


Keerthana S SGPA:9.73 CGPA:9.40



# **1ST SEMESTER TOPPERS**





**Sharon Prince Thomas** SGPA:9.75



Swathi M SGPA:9.65



Krupa P S SGPA:9.46



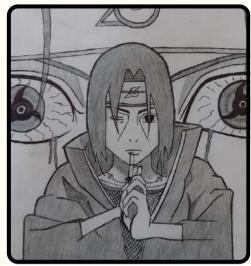
### **SKETCHES & PAINTING**



By MS.Shivanjali (Faculty)



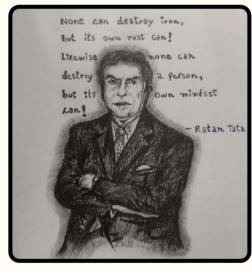
By Nishchitha M (1st Sem BCA C)



By Princika B (3rd Sem BCA A)



By Rashmi V C (3rd Sem BCA A)



By Markleeng (3rd sem BCA A)



By Trisha.k (1st SemBCA C)





By Tahiya (3rd sem BCA C)



By Poorna Shree J (5th sem BCA)

## RIDDLES

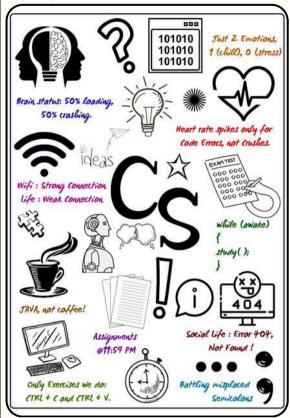
### 

- Acros
- 1. I can chat all day without a voice, Bringing friends together, making them rejoice. Though I can't walk, I roam worldwide, What am I, with the world inside?
- 4. I am a program code that can copy itself and spread to other computers or networks. What am I?
- **6.** I am often found at the end of a line, but I'm not a period or a rhyme. What am I?
- 8. I can be open or closed but I do not have a door. In code, I serve a purpose to execute commands and more. What am I?
- 10. I am not a spy, but I often work in secret, protecting information from being tampered or checked. What am I?
- 11. I'm often created weak so I'm not forgotten. Sometimes I'm reset, if my owner forgets me. What am I?

#### nwo

- 2. I travel the world without moving an inch,Connecting continents with a mere blink.I'm not alive, but I can grow,Who am I, do you know?
- 3. I am a light in the dark, but not a bulb or a star; I guide you through data, near and far. What am I?
- **5.** I am a protocol that allows secure communication over the Internet. I encrypt files to prevent unauthorized access. What am I?
- 7. I am not alive, but I process; I don't have a CPU, but I need power; I don't have a screen, but output kills me. What am I?
- 8. I stand watch at the gates, deciding who proceeds, Filtering the flow, meeting digital needs. Guarding against foes, unseen but known, Who am I, in this cybernetic throne?
- I store the tales of yesterday, And all the facts you use today. I don't have shelves, but hold more books, What am I? Take a closer look.

# DOODLE ART

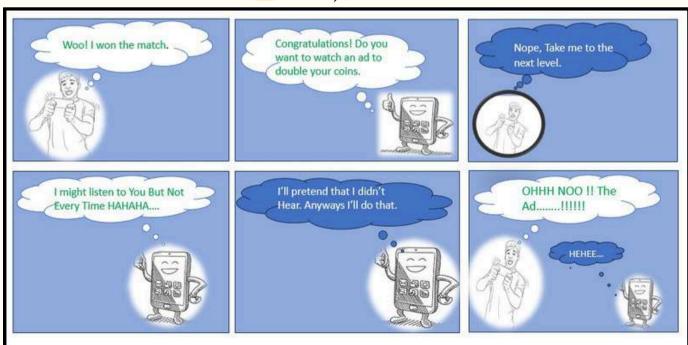


By Ms. Bhavya C(Faculty)

#### By A Anthony Pani Vivithan (3rd sem BCA-A)







By Samiksha Mukund(1st sem BCA-C)