

36 Lecture - CS101

Important Subjective

1. What is the significance of the Analytical Engine in the roots of computing?

Answer: The Analytical Engine, designed by Charles Babbage in the mid-19th century, was one of the earliest mechanical general-purpose computers, and it laid the foundation for modern computing.

2. Who is considered the father of modern computing?

Answer: Alan Turing is widely considered the father of modern computing for his contributions to the development of theoretical computer science and the cracking of the Nazi Enigma code during World War II.

3. What was the first computer program?

Answer: The first computer program was written by Ada Lovelace in the 19th century for Charles Babbage's Analytical Engine. It was an algorithm for calculating Bernoulli numbers.

4. Who invented the first electronic computer?

Answer: The first electronic computer was the ENIAC (Electronic Numerical Integrator And Computer), which was invented by John Mauchly and J. Prosper Eckert in 1945.

5. What is the significance of the invention of the transistor in computing history?

Answer: The invention of the transistor in 1947 by John Bardeen, Walter Brattain, and William Shockley paved the way for the development of smaller, faster, and more efficient electronic devices, including computers.

6. What is the difference between a computer and a calculator?

Answer: A calculator is a small, specialized device designed to perform mathematical calculations, while a computer is a more general-purpose device that can perform a wide variety of tasks, including mathematical calculations.

7. Who invented the World Wide Web?

Answer: The World Wide Web was invented by British computer scientist Tim Berners-Lee in 1989.

8. What is the significance of Moore's Law in computing history?

Answer: Moore's Law is a prediction made by Intel co-founder Gordon Moore in 1965 that the number of transistors on a microchip would double every two years, leading to exponential growth

in computing power. It has proven to be remarkably accurate and has driven much of the rapid progress in computing over the past few decades.

9. **What is the difference between software and hardware?**

Answer: Hardware refers to the physical components of a computer, such as a processor, memory, and storage devices, while software refers to the programs and instructions that run on the hardware to perform specific tasks.

10. **What is the significance of the invention of the GUI in computing history?**

Answer: The invention of the graphical user interface (GUI) by Xerox PARC in the 1970s revolutionized the way people interact with computers by making it easier and more intuitive to use. It led to the widespread adoption of personal computers and has influenced the design of many other electronic devices, such as smartphones and tablets.