Jamil Maxi C. Blanco

CPE11S1

EXERCISE 1:

1.) What is Computer?

2.) What are the essential parts of computer?

3.) Who are the notable inventors of hardware and software Cite at least (5) software developers and (5) hardware developers.

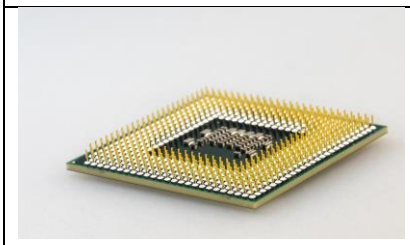
4.) Cite your reference/s (APA/IEEE).

ANSWERS:

1.) A computer is a type of significant device that everyone can use freely for different kinds of purposes. Since it can store, save, and record all your significant data, according to Aparna (2024), a computer is an electronic device. wherein we need to input raw data to be processed with a set of programs to produce desirable output. Rather than that, a computer may offer a wide range of opportunities, especially for every user: first, every user might acquire significant knowledge that is usable for their current and future uses; second, it is also an alternative communicable device for every user.

2.) The following important parts of computer are:

	**A.) Motherboard**	- The motherboard is a very significant component that computers have because all of the parts of the computer are rarely connected to the motherboard. To explain further, if there is no motherboard, there is no computer, whereas the motherboard will

		serve as the heart of the whole computer.
	**B.) <u>Power Supply</u>**	- As we can read from the name itself, "power supply" is also an important component in the computer because it allows the motherboard to work as freely as it can. Another thing is that it powers or delivers the required energy to the computer.
	**<u>C.) CPU</u>**	- The CPU stands for Central Processing Unit, which also serves as the as the brain for our general parts of the computer. It defines that the more value that CPU has, the more access you have to high-definition video.
	**<u>D.) RAM (Random-access Memory)</u>**	- To easily understand the concept of RAM, the more RAM you have, the more you can access more programs and software. So, the reason why some computers are slow in different programs is because they lack RAM.

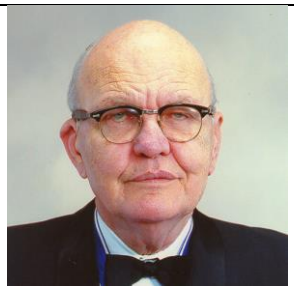
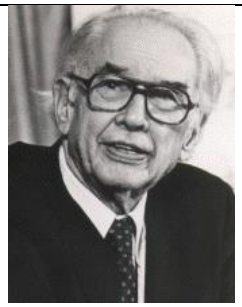
	**E.) Hard Disk Drive**	- HDD acts as an important role of a computer because, here, we can see all the data that is stored on our computer. In short, it serves as a storage device.

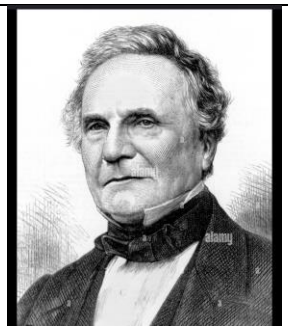
3.) 5 NOTABLE SOFTWARE DEVELOPERS:

 **A. Larry Page**	- Is an American computer scientist who, with Sergey Brin, created the online search engine Google.
 **B. Margaret Hamilton**	- He is also an American computer scientist who was one of the first computer programmers and created the term "software engineer."
 **C. Guido Van Rossum**	- He is a Dutch computer scientist and also created phyton programming in 1989.

 D. **Bill Gates**	- Bill Gates is a software developer best known for founding Microsoft, which is the largest personal computer.
 **E. James Gosling**	- James Gosling is a computer scientist who was born in Canada, and he is also best known for being the father of Java.

5 NOTABLE HARDWARE DEVELOPERS:

 **F. Jack Kilby**	- Is an American engineer who invented the integrated circuit in 1958. Another contribution from him that brings us an improvement to the computer is the transistors, resistors, and capacitors, which can be grouped on a single board of semiconductor material. Another vital component that helps our computers is what we call the microchip.
 **G. John Atanas**	- Is an American physicist who developed the Atanasoff-Berry Computer, or ABC in short. This Atanasoff-Berry computer is the first ever digital computer that is able to solve differential equations by using binary arithmetic.

 **H. <u>Seymour Cray</u>**	- Seymour Cray is also known as American electronics engineer and computer designer who was the preeminent designer of the large, high-speed computers known as supercomputers. Whereas supercomputers are classified as extremely powerful types of computers, they are best known for being the fastest high-performance computers.
 **I. <u>Charles Babbage</u>**	- Charles Babbage also created the first automatic digital computer and was an English mathematician and inventor.
 **J. <u>John von Neumann</u>**	- John von Neumann is a computer architect; he also described an architecture for a digital computer that contains a program counter (PC), which is to store memory like data and more.

4.) **<u>CITATIONS</u>**:

A.) Aparna. (2024). What is computer? Definition, Characteristics and Classifications. CareerPower. https://www.careerpower.in/school/computer/what-is-a-computer

B.) Huok, D. (2024). 8 Standard Computer Components and What They Do. NEXT IT. https://www.next7it.com/insights/standard-computer-components/

C.) Britannica, T. Editors of Encyclopaedia (2024, August 10). Larry Page. Encyclopedia Britannica. https://www.britannica.com/money/Larry-Page

D.) Websensa. (2023, February 28). 15 most famous programmers who changed the IT world forever. Websensa. https://www.websensa.com/blog/15-most-famous-programmers-who-changed-the-it-world-forever

E.) Kaur, G. (2023, February 04). Top 10 most famous computer programmers of all time. COINTELEGRAPH. https://cointelegraph.com/news/top-10-most-famous-computer-programmers-of-all-time

F.) Britannica, T. Editors of Encyclopaedia (2024, June 11). *John Vincent Atanasoff*. *Encyclopedia Britannica*. https://www.britannica.com/biography/John-V-Atanasoff

G.) Britannica, T. Editors of Encyclopaedia (2024, February 23). Seymour Cray. Encyclopedia Britannica. https://www.britannica.com/biography/Seymour-R-Cray

H.) Britannica, T. Editors of Encyclopaedia (2024, July 23). Charles Babbage. Encyclopedia Britannica. https://www.britannica.com/biography/Charles-Babbage

I.) Rosenberg (2017). Von Neumann Architecture. ScienceDIrect. https://www.sciencedirect.com/topics/computer-science/von-neumann-architecture