Computer Applications in Statistics (STAT-5103)

Computer and their Uses

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Topics

What is computer?

➢ The word "computer" come from the word "compute", which means calculation.
➢ In 1613, a English writer use the word computer in his book.

Definition:
Computer is an electronic device that can ***follow instructions to accept input, process the input*** and then ***produce information***.

    The computer

        first, Accepts data such as raw facts, figures, and symbol
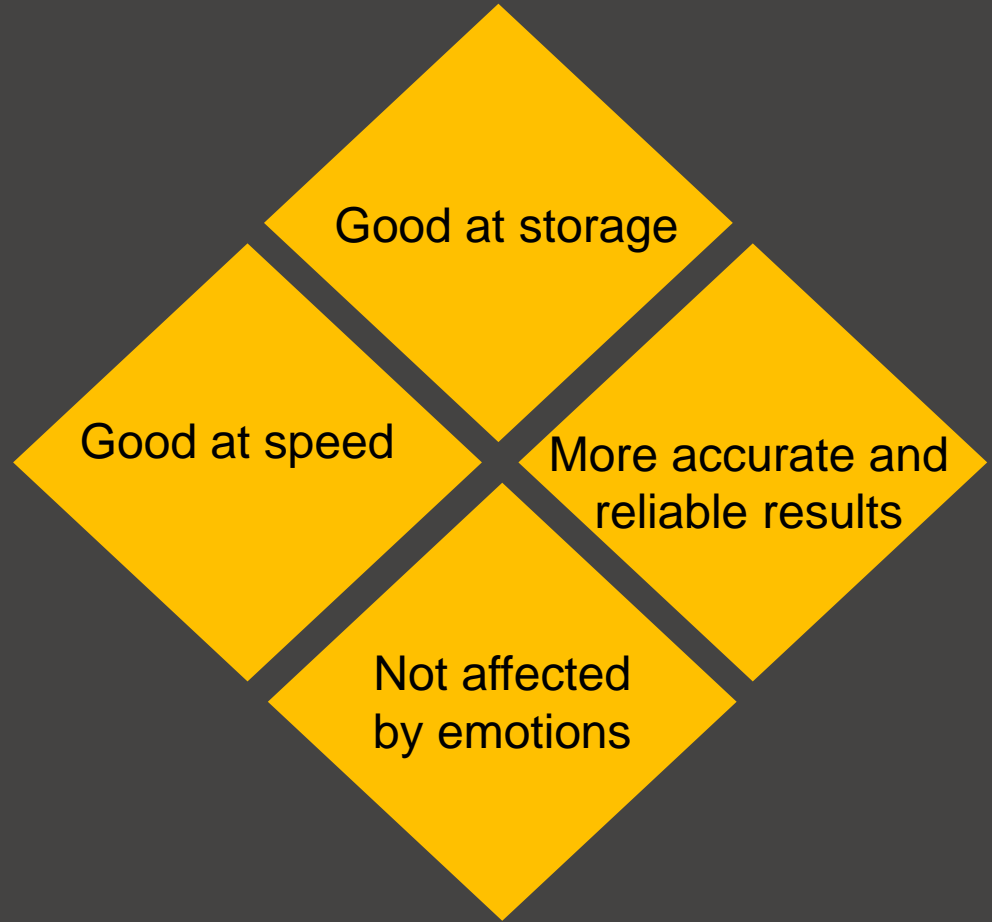   then, Processes data into information
            (Data that is organized, meaningful, and useful)
        finally, Produces and stores results

➢ Now a days all computers are controlled by programmed instructions.

Why computer is so powerful than human being?

Good at storage

Good at speed

More accurate and reliable results

Not affected by emotions

Types of computers

1. Analog computers

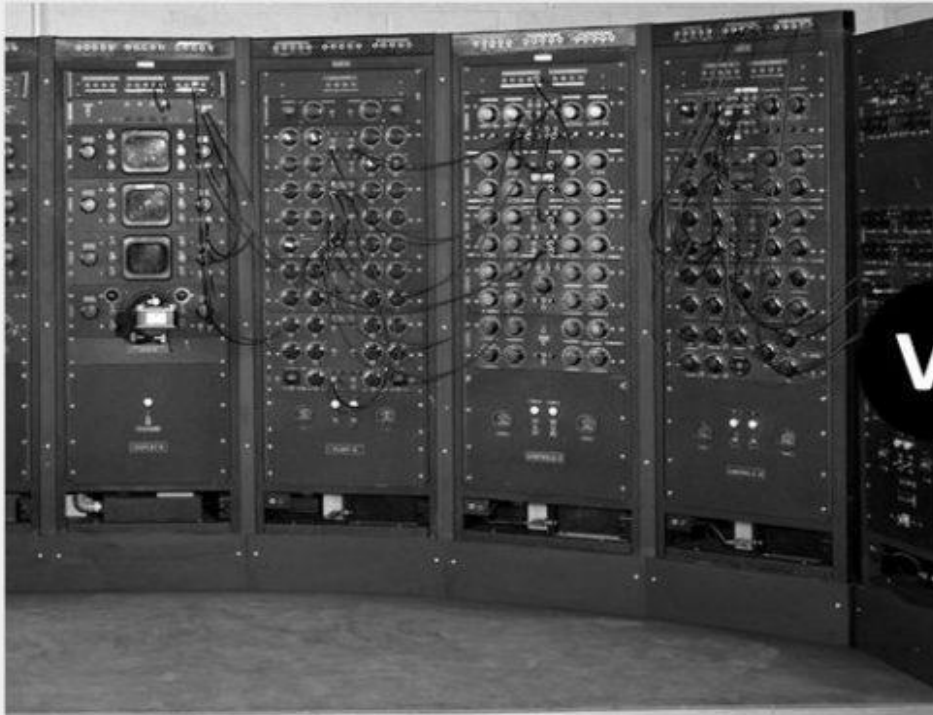Analog computers works with continuous values.

- Less speed
- Limited memory
- Less reliable
- Less accuracy
- Difficult to use
- Power consumption is high

2. Digital computers

Digital computers works with discrete values.

- Good speed
- It can store large amount of data
- More reliable
- Higher accuracy
- Not so difficult to use
- Power consumption is low

Analog computer vs Digital computer

Analog Computer vs. Digital Computer

Categories of computers

- ❖ Computers for individual users

- ❖ Computers for organizations

Computers for individual users

➢ **Desktop computers**

Designed so all of the components fit on or under a desk or table.

➢ **Workstations computers**

Designed for a single user and has advanced graphics capabilities, large storage capacity, and a powerful microprocessor.

Computers for individual users

➢ **Notebook computers**

Sometimes called a laptop computer, typically weighs less than 5 pounds and is 3 inches or less in thickness.

➢ **Tablet computers**

Commonly shortened to **tablet**, is a mobile device, typical ly with a mobile operating system and touchscreen display processing circuitry, and a rechargeable battery in a single , thin and flat package.

Computers for individual users

➢ **Smart phones**

A mobile device that combines cellular and mobile computing functions into one unit.

➢ **Handheld computers**

Also called Personal Digital Assistants (PDAs) that can conveniently be stored in a pocket and used while you're holding it.
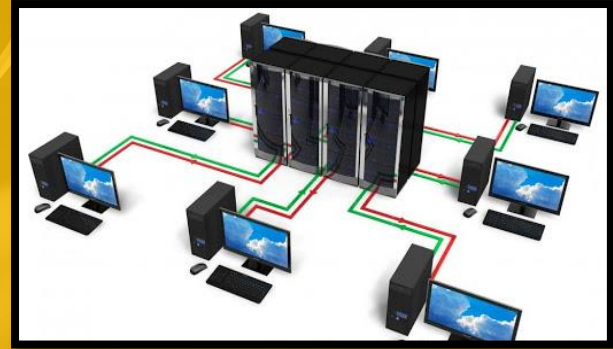
Computers for organizations

➢ **Network servers:**

A network server is a computer system, which is used as the central repository of data and various programs that are shared by users in a network.

➢ **Mainframe computers:**

Informally called a mainframe or big iron, is a computer used primarily by large organizations for critical applications, bulk data processing (such as the census and industry and consumer statistics, enterprise resource planning, and large-scale transaction processing.

MAINFRAME COMPUTER

Computers for organizations

➢ **Minicomputers:**

It is a type of computer that possesses most of the features and capabilities of a large computer but is smaller in physical size.

➢ **Supercomputers:**

It is a computer that performs at or near the currently highest operational rate for computers. Traditionally, supercomputers have been used for scientific and engineering applications that must handle very large databases or do a great amount of computation (or both).

Uses of computer in our society

Home

Education

Business

Mobile

Industry

Government

Health care

Banking

THANKS FOR YOUR ATTENTION