



DAR ES SALAAM SCHOOL OF JOURNALISM

- ❖ MODULE NAME: COMPUTER PORTS AND COMPUTER MEMORY
- ❖ MODULE CODE: GST 040103
- ❖ DEPARTMENT : INFORMATION TECHNOLOGY
- ❖ MODULE SEMESTER: I
- ❖ TUTOR'S NAME: MADAM PENDO BONIPHACE KIBUTI

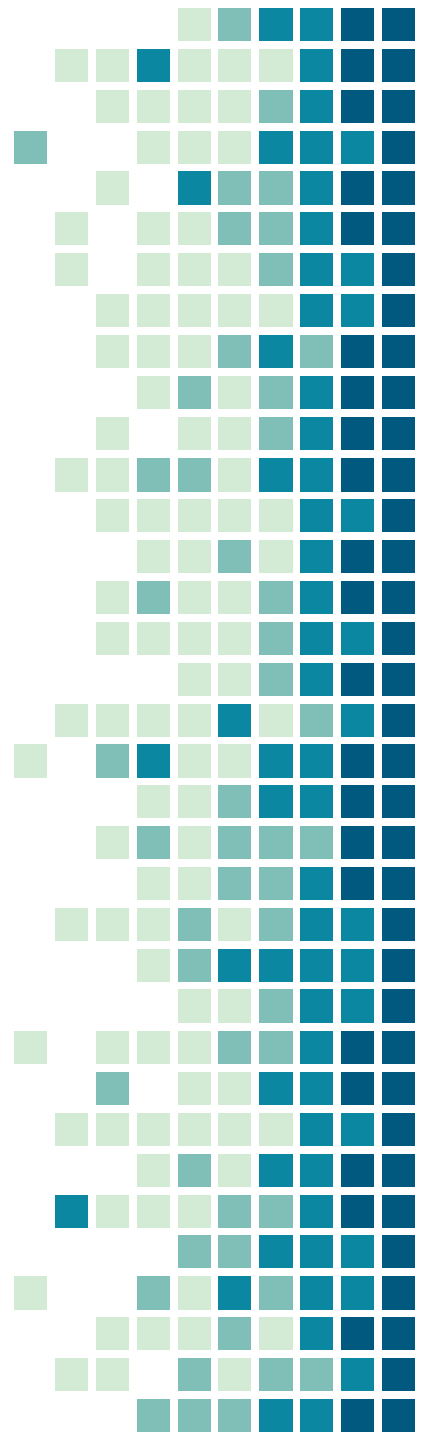


OUR MOTTOR: MEDIA FOR DEMOC



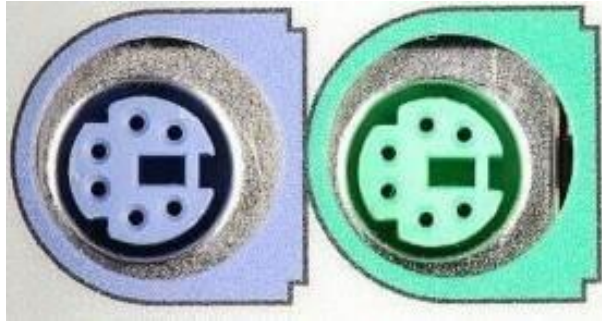
COMPUTER PORTS

- ❖ A port is a connection or a jack provided on a computer to connect external or peripheral devices to the computer, for example, you will need a port on your device to connect a keyboard, mouse, pen-drives, etc. So, it acts as an interface or a point of attachment between computer
- ❖ and external devices



PS/2:

- As the name suggests, it was introduced with IBM's Personal Systems/2 series of computers. These connectors are color coded, e.g., green was for mouse, and purple was for the keyboard. Besides this, it is a DIN connector with six pins. At present, it is superseded by USB ports



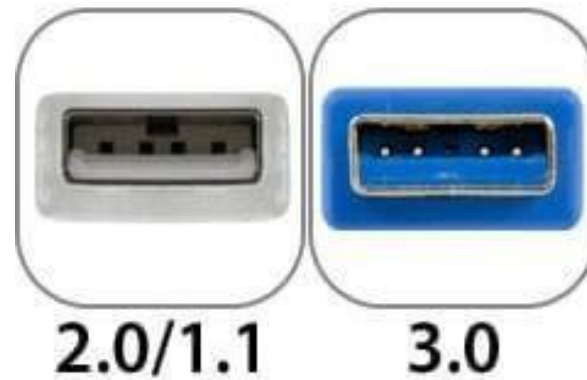
VGA Port

- This port is commonly found in computers, projectors, and high definition TVs. It is a D-sub connector called DR-15 as it has 15 pins, which are arranged in 3 rows with five pins in each row. It was most often used to connect CPU
- with CRT monitors. Still, most of the LCD
- and LED
- monitors come with VGA
- ports. However, these ports don't assure high picture quality as VGA can carry only analogue video signals up to a resolution of 648X480.



USB:

- USB (Universal Serial Bus) port is very versatile in use; It can be used for various purposes, such as to transfer data, to connect peripheral devices, and even as an interface for charging devices such as smartphones, digital cameras, etc. Today, it has replaced PS/2 connectors, game ports, serial and parallel ports, etc.



RJ-45:

- It is an Ethernet style network port found on the computer and other devices such as routers, switches, etc. This port allows your computer to interact or communicate with other computers and networking devices where Ethernet networking is required.

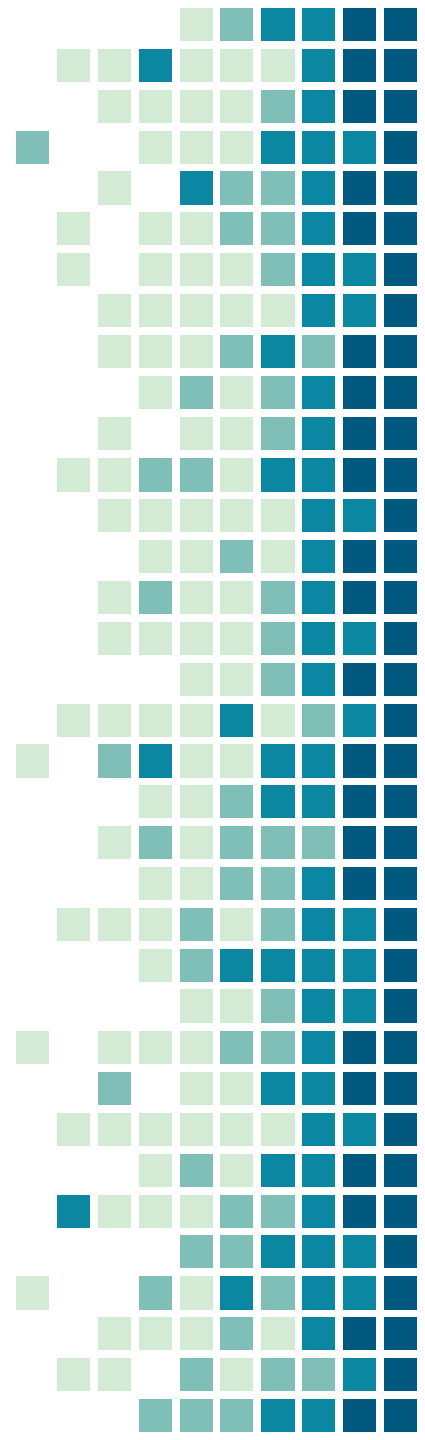


COMPUTER MEMORY

- Computer memory is the storage space in the computer, where data is to be processed and instructions required for processing are stored. memory is just like a human brain.

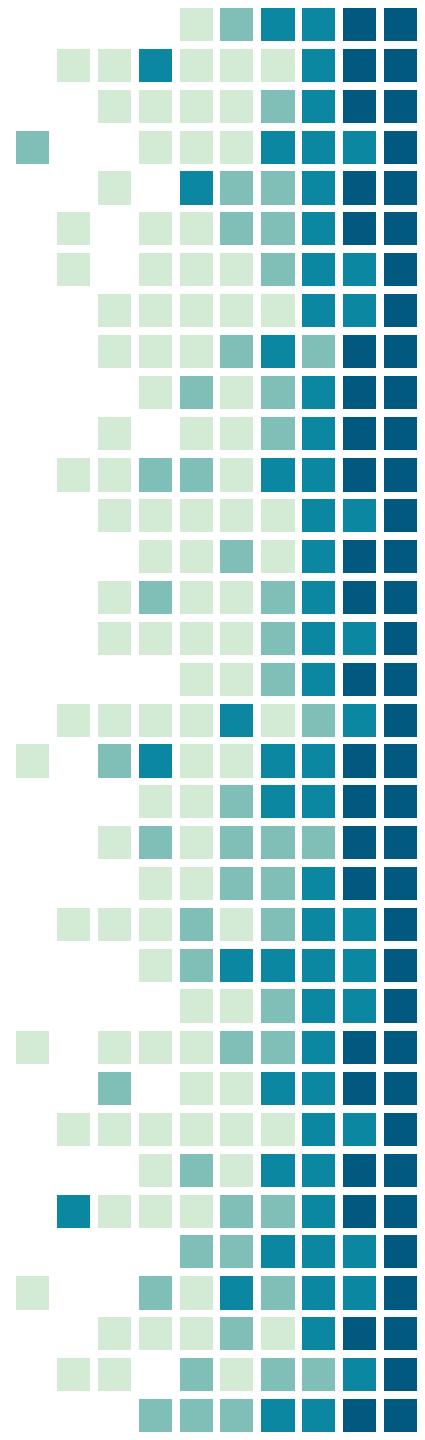
Memory is
primarily of three
types –

- Cache Memory
- Primary Memory/Main Memory
- Secondary Memory



CACHE MEMORY

- Cache memory is a very high speed semiconductor memory which can speed up the CPU.
- It acts as a buffer between the CPU and the main memory.
- It is used to hold those parts of data and program which are most frequently used by the CPU. The parts of data and programs are transferred from the disk to cache memory by the operating system, from where the CPU can access them



Advantages and disadvantages of cache memory

■ The advantages of cache memory are as follows:

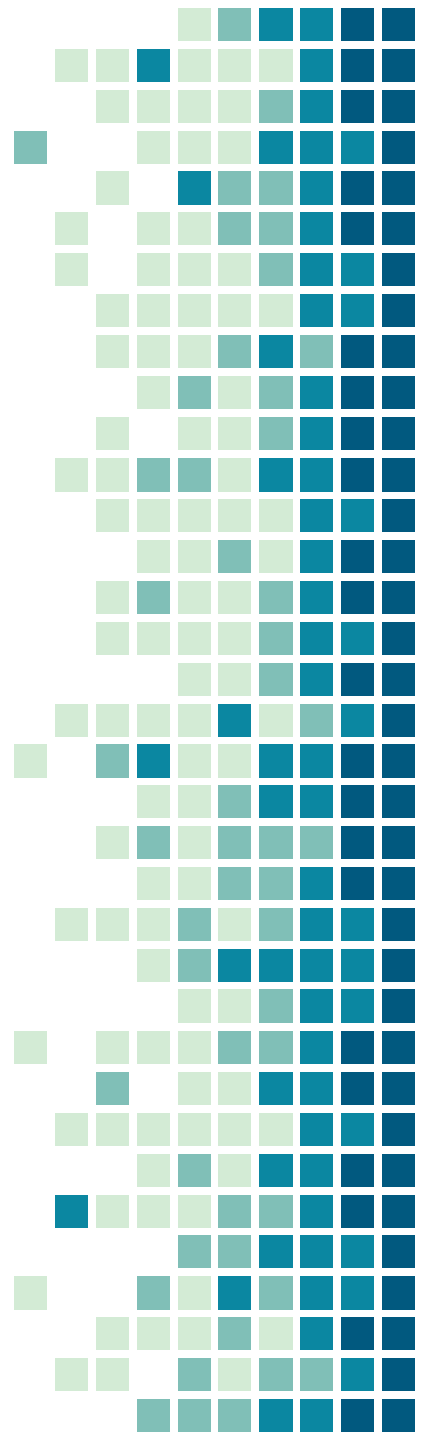
- ❖ Cache memory is faster than main memory
- ❖ It consumes less access time as compared to main memory
- ❖ It stores the program that can be executed within a short period of time.
- ❖ It stores data for temporary use

The disadvantages of cache memory are as follows:

- ❖ Cache memory has limited capacity.
- ❖ It is very expensive.

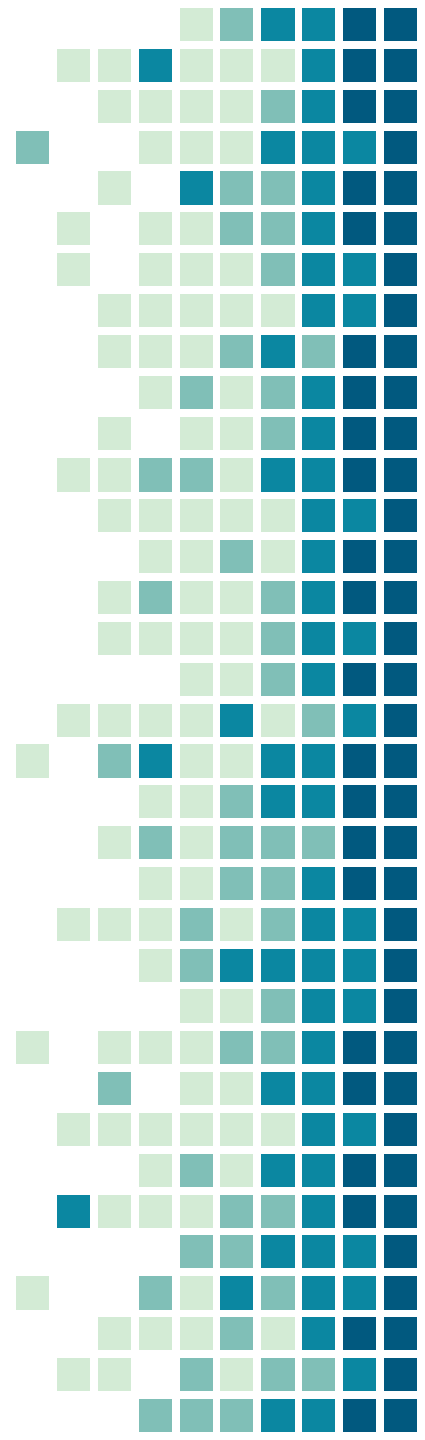
PRIMARY MEMORY(MAIN MEMORY)

- ❖ Primary memory holds only those data and instructions on which the computer is currently working.
- ❖ It has a limited capacity and data is lost when power is switched off. It is generally made up of semiconductor device.
- ❖ These memories are not as fast as registers. The data and instruction required to be processed resides in the main memory.
- ❖ It is divided into two subcategories RAM and ROM.



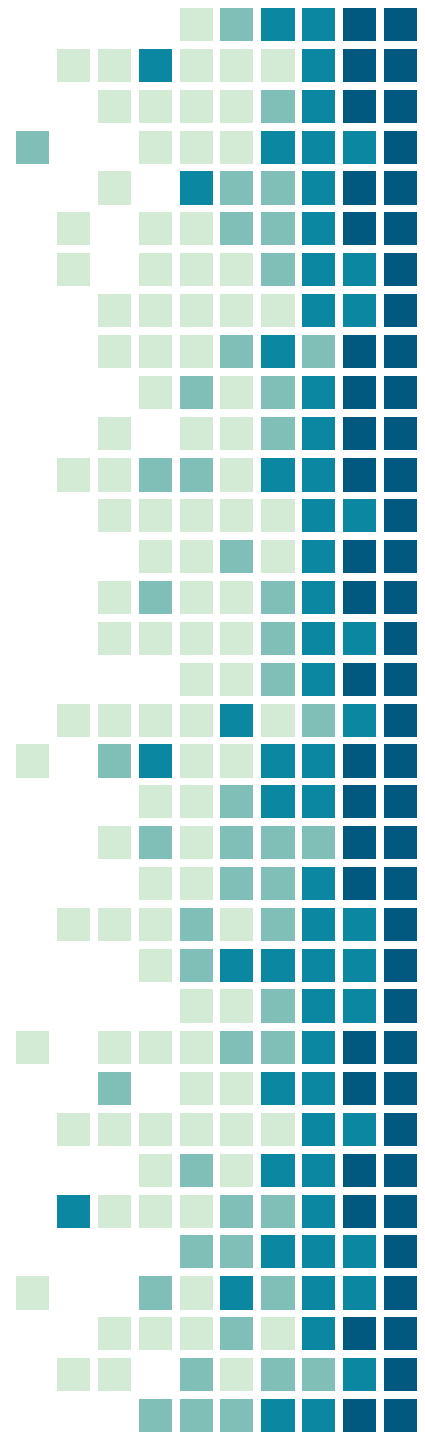
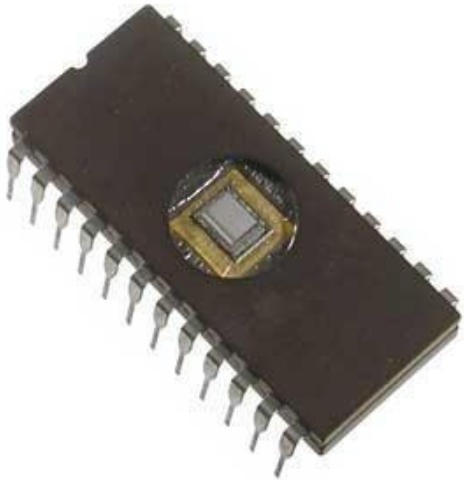
RAM(RANDOM ACCESS MEMORY)

- ❖ RAM (Random Access Memory) is the internal memory of the CPU for storing data, program, and program result.
- ❖ It is a read/write memory which stores data until the machine is working. As soon as the machine is switched off, data is erased.



READ ONLY MEMORY(ROM)

- ❖ ROM stands for **Read Only Memory**. The memory from which we can
- ❖ only read but cannot write on it. This type of memory is non-volatile.
- ❖ The information is stored permanently in such memories during manufacture. A ROM stores such instructions that are required to start a computer.
- ❖ This operation is referred to as **bootstrap**. ROM chips are not only used in the computer but also in other electronic items like washing machine and microwave oven.



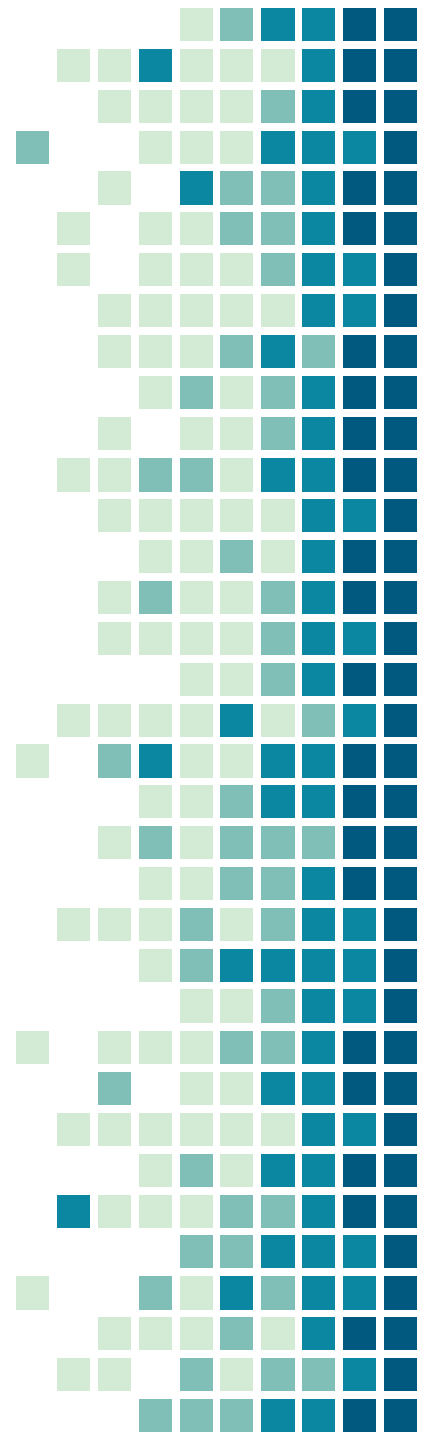
Advantages of ROM

- ❖ Non-volatile in nature
- ❖ Cannot be accidentally changed
- ❖ Cheaper than RAMs
- ❖ Easy to test
- ❖ More reliable than RAMs
- ❖ Static and do not require refreshing
- ❖ Contents are always known and can be verified



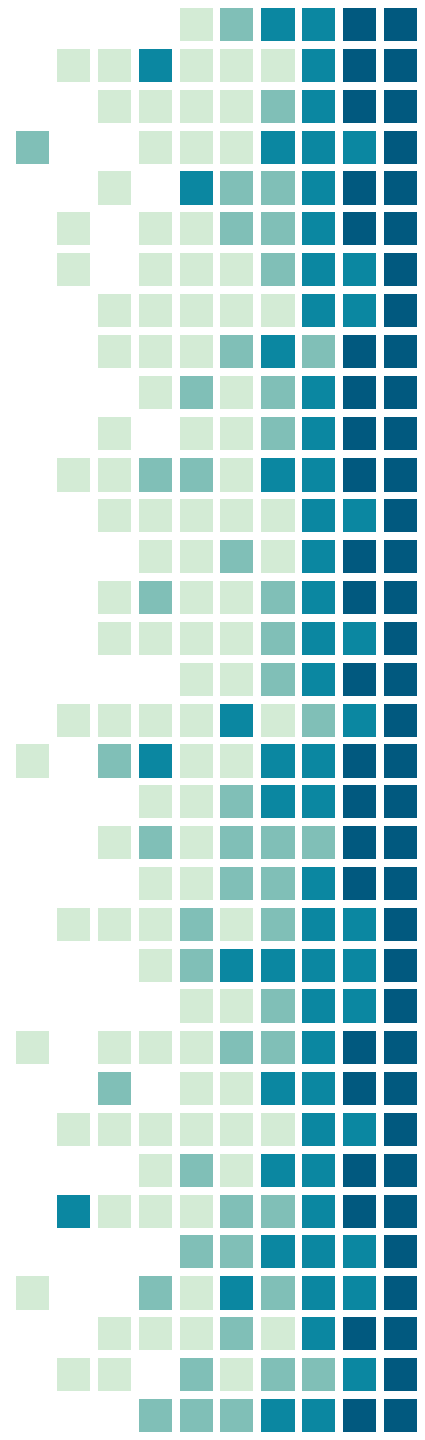
CHARACTERISTICS OF MAIN MEMORY

- These are semiconductor memories.
- It is known as the main memory.
- Usually volatile memory.
- Data is lost in case power is switched off.
- It is the working memory of the computer.
- Faster than secondary memories.
- A computer cannot run without the primary memory



SECONDARY MEMORY

- ❖ This type of memory is also known as external memory or non-volatile. It is slower than the main memory.
- ❖ These are used for storing data/information permanently.
- ❖ CPU directly does not access these memories, instead they are accessed via input-output routines. The contents of secondary memories are first transferred to the main memory, and then the CPU can access it. For example, disk, CD-ROM, DVD, etc



CHARACTERISTICS OF SECONDARY MEMORY

- These are magnetic and optical memories.
- It is known as the backup memory.
- It is a non-volatile memory.
- Data is permanently stored even if power is switched off.
- It is used for storage of data in a computer.
- Computer may run without the secondary memory.
- Slower than primary memories.

