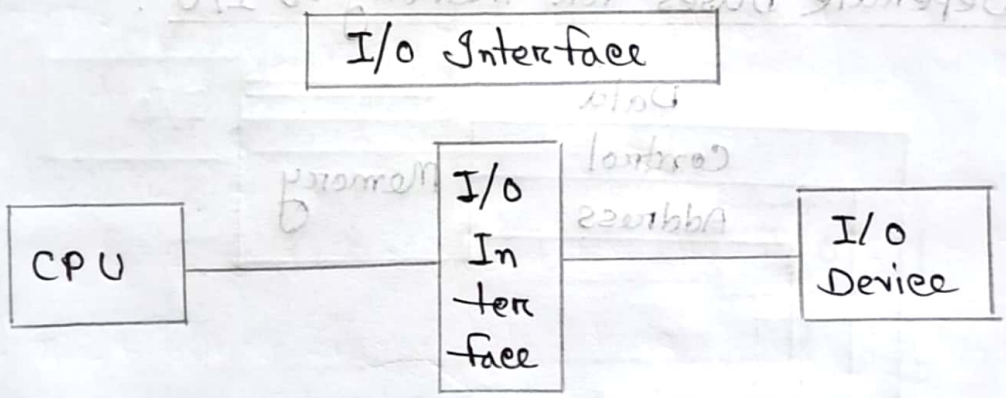


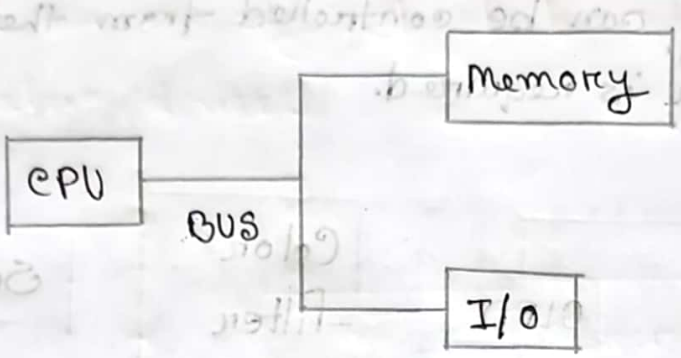
The interface that allows the CPU to use I/O device is called I/O interface.

* Types of BUS?

⇒ BUS'es are data flow lines connecting CPU and peripherals.

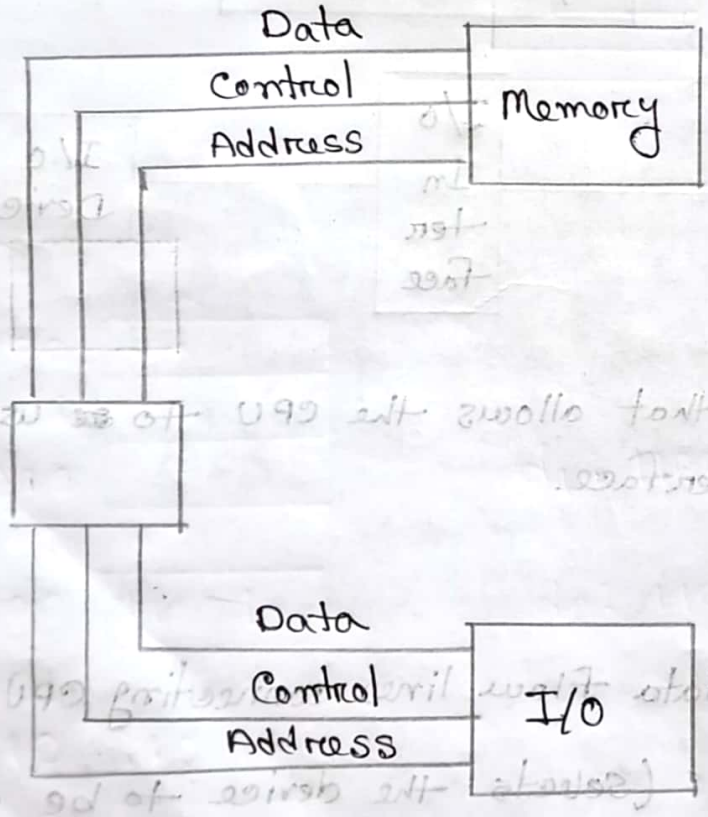
- Address BUS (selects the device to be connected with CPU)
- Control BUS (Flow of control info)
- Data BUS (Flow of data)

Memory & I/O Mapping



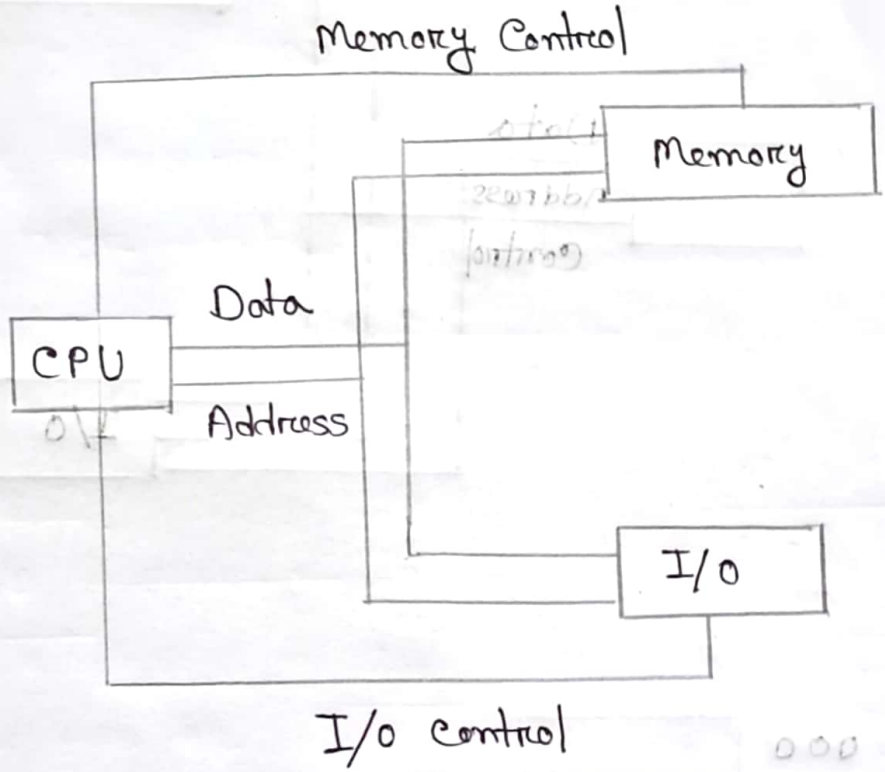
CPU transfer data from on to both memory & I/O devices. To distinguish I/O from memory, three techniques can be employed.

① Seperate buses for memory & I/O :



② I/O Mapped I/O

- Common data and address bus.
- seperate control bus.



③ Memory Mapped I/O : All BUS'es are common

Address of the I/O devices are stored in memory. For example a memory with eight bytes is available. We have two I/O devices addressed 11001 and 110010. These addresses are stored in memory locations of ~~the memory~~ 100 and 110. When CPU hits 100 or 110

location of the memory. It starts I/O operation with the respective device.