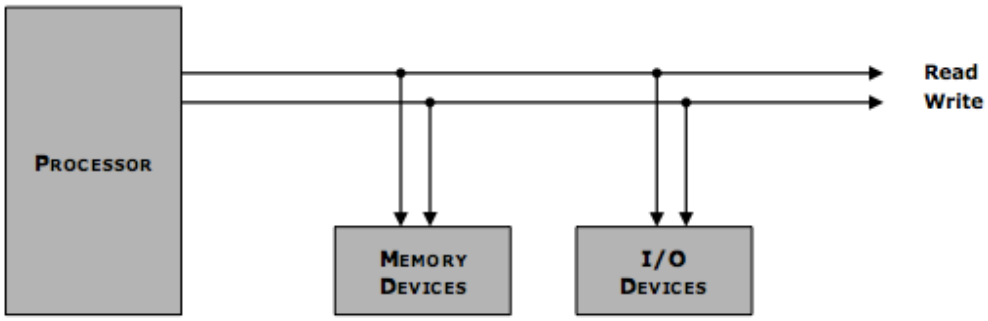
	MEMORY MAPPED I/O	I/O MAPPED I/O
1	**I/O devices are mapped into memory space.**	**I/O devices are mapped into I/O space.**
2	I/O devices are allotted **memory addresses**.	I/O devices are allotted **I/O addresses**.
3	Processor **does not differentiate** between memory and I/O. Treats I/O devices also like memory devices.	Processor **differentiates between I/O devices and memory**. It isolates I/O devices.
4	I/O addresses are as big as memory addresses. E.g.:: in 8085, **I/O addresses will be 16 bit** as memory addresses are also 16-bit.	I/O addresses are smaller than memory addresses. E.g.:: in 8085, **I/O addresses will be 8 bit** though memory addresses are 16-bit.
5	This allows us to increase the number of I/O devices. E.g.:: in 8085, we can access up to **2^{16} = 65536 I/O devices**.	This allows us to access limited number of I/O devices. E.g.:: in 8085, we can access only up to **2^{8} = 256 I/O devices**.
6	We can transfer data from I/O devices using **any instruction like MOV** etc.	We can transfer data from I/O device using **dedicated I/O instructions like IN and OUT ONLY**.
7	Data can be transferred using **any register** of the processor.	Data can be transferred only using a fixed register. E.g.:: in 8085 only **"A" register**.
8	We need **only two control** signals in the system: Read and Write.	We need **four control signals**: Memory Read, Memory Write and I/O Read and I/O Write
9	Memory addresses are big so **address decoding will be slower**.	I/O addresses are smaller so **address decoding will be faster**.
10	Address decoding will be **more complex and costly**.	Address decoding will be **simpler and cheaper**.

MEMORY MAPPED I/O



I/O MAPPED I/O