

How the OS communicates with the device?

- ➔ Each device has three types of registers
and the OS controls the device by reading or writing these registers

status register

See the current status of the device

command register (also called control register)

Tell the device to perform a certain task

data register

Pass data to the device, or get data from the device

Two ways to read/write those registers

I/O ports

`in` and `out` instructions on x86 to read and write devices registers

Memory-mapped I/O

Device registers are available as if they were memory locations and the OS can `load` (to read) or `store` (to write) to the device