# 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