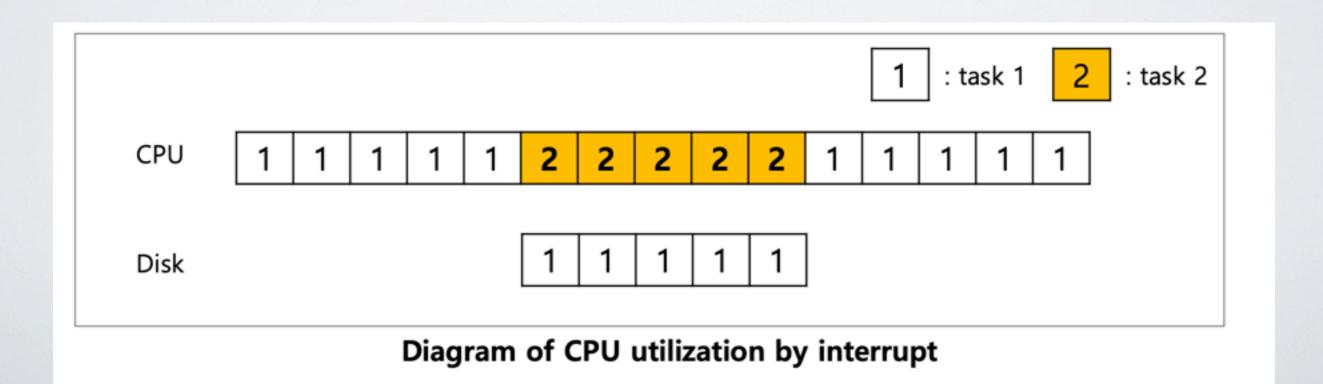
Interrupts

- 1. Put the I/O request process to sleep and switch context
- 2. When the device is finished, send an interrupt to wake the process waiting for the I/O
- √ CPU is properly utilized



Polling vs Interrupts

→ Interrupts is not always the best solution

If, device performs very quickly, interrupt will slow down the system

E.g. high network packet arrival rate

- Packets can arrive faster than OS can process them
- Interrupts are very expensive (context switch)
- Interrupt handlers have high priority
- In worst case, can spend 100% of time in interrupt handler and never make any progress a.k.a receive livelock
- ✓ Best adaptive switching between interrupts and polling