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

One More Problem : Data Copying
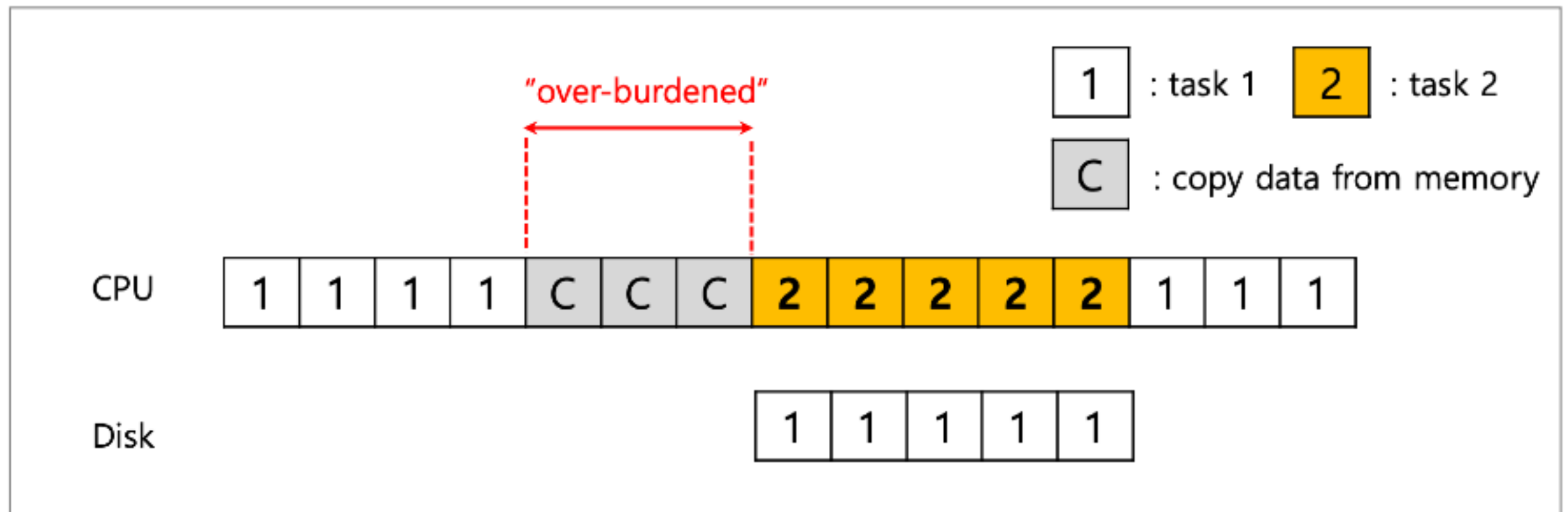
● CPU wastes a lot of time in copying a large chunk of data from memory to the device

Diagram of CPU utilization