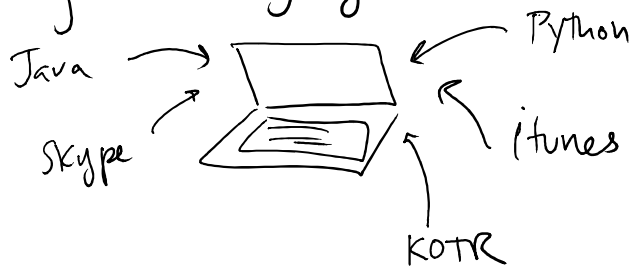


# Scheduling

Suppose you are trying to run many applications on a processor



What order is best?

Each job  $i$ ;  $i \in \{1, \dots, n\}$

- weight (importance)  $w_i$

- time  $t_i$  to complete

def: Completion time  $C_j$  of job  $j$  is sum of times required to complete all jobs run before  $j$ , plus  $t_j$ .

Scheduling Goal:

$$\text{Minimize } \sum_{j=1}^n w_j C_j \iff \text{"Objective function"}_A$$

Q: Why is this a good goal?

A: If important jobs left until end,  $w_j C_j \rightarrow A$  large

$\uparrow \quad \uparrow$   
 large large