

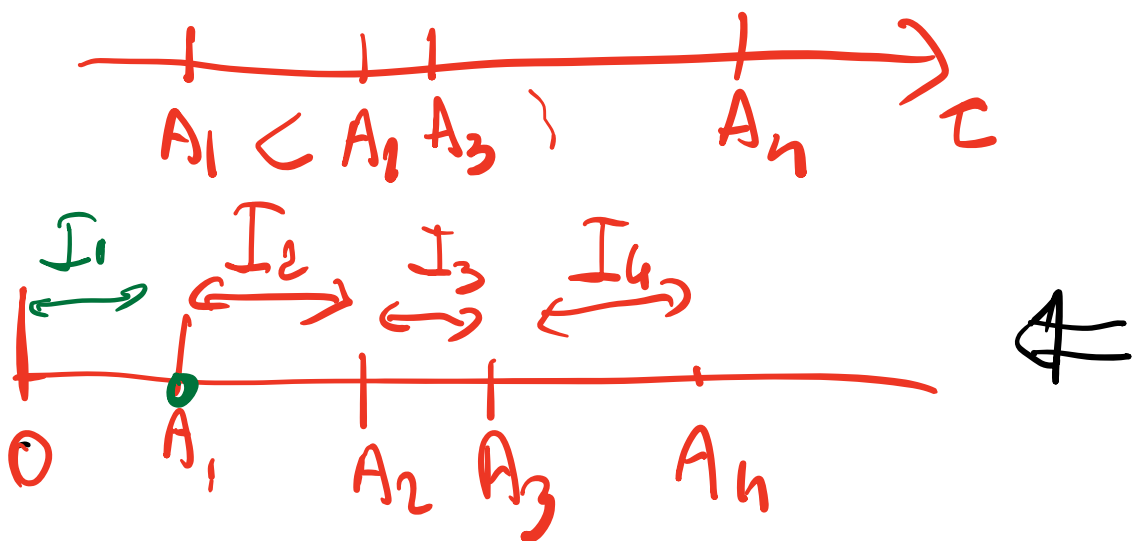
Inputs: arrival times ←
 → Service times ←

FIFO - FCFS

S_1, S_2, \dots

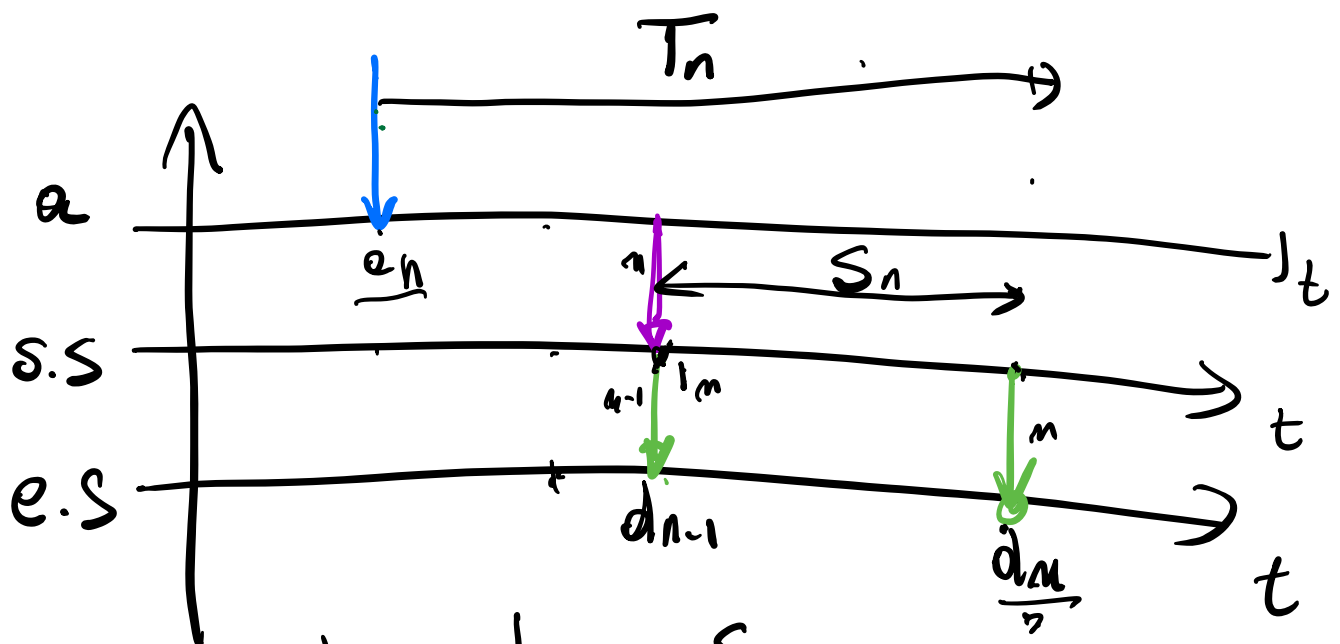
$\{S_n\}$ iid with a given distribution

$\{A_n\}$ ~~iid~~?



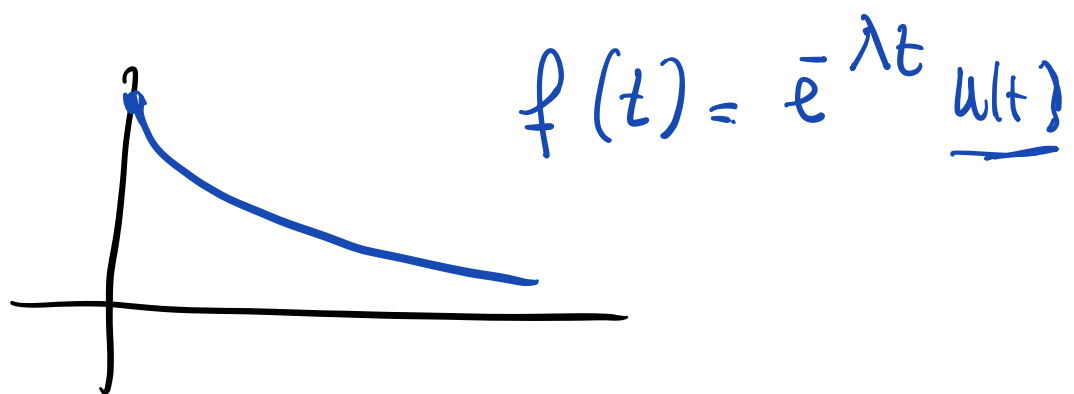
$\{I_n\}$ iid

$$\underline{Q_n = Q_{n-1} + I_n}$$



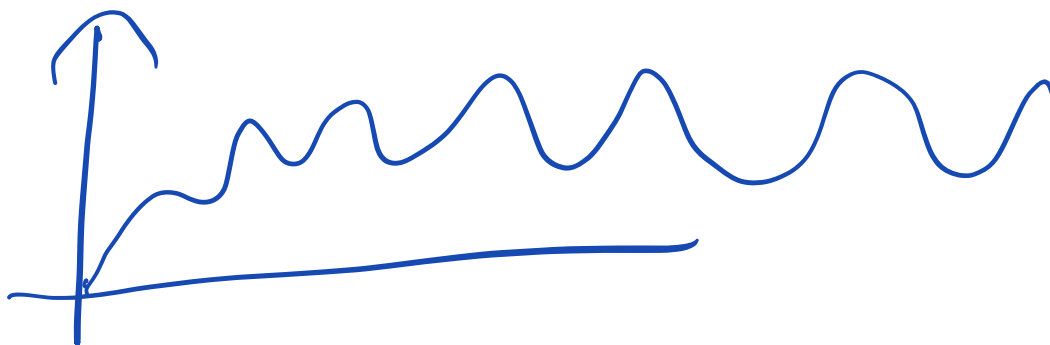
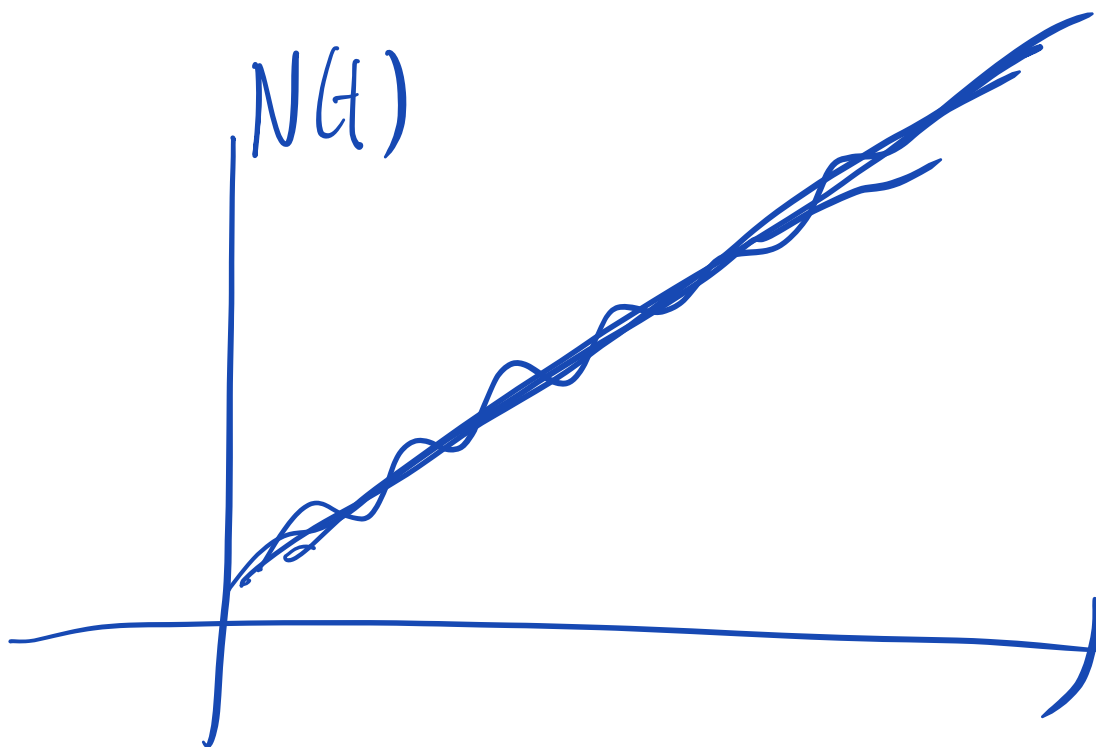
$$d_n = d_{n-1} + S_n$$

current time



$$f(t) = e^{-\lambda t} \underline{u(t)}$$

random. exponential (t)



$$\lambda E[S] < 1$$