

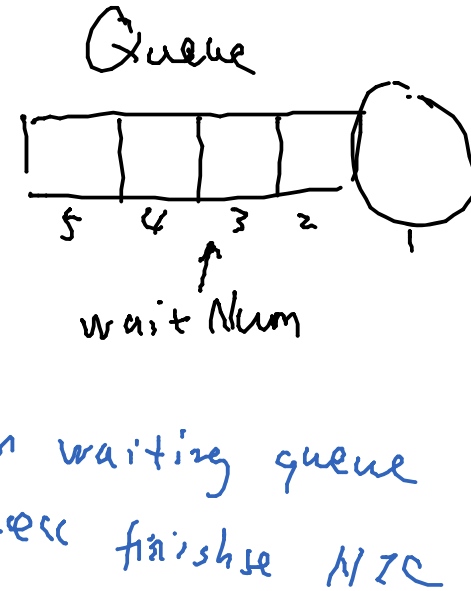
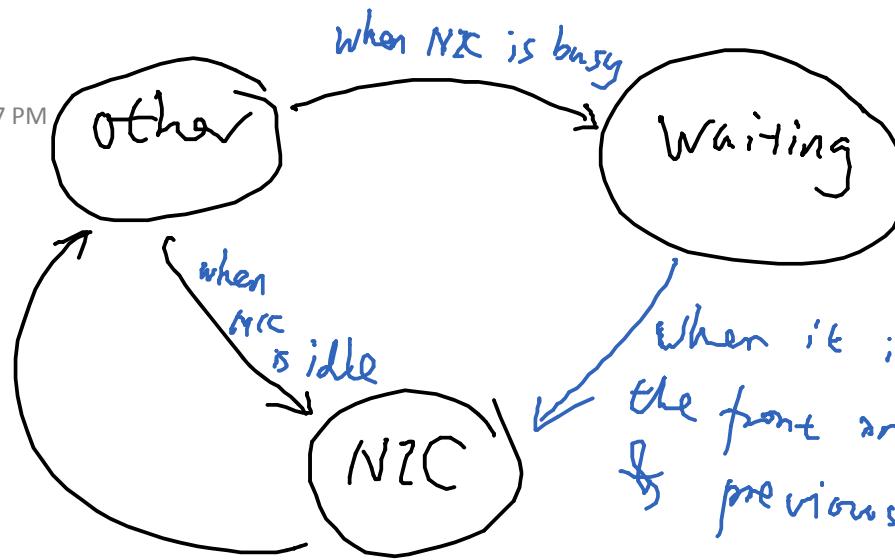
① lower bound for simulation end time: $5 \text{ sec} \times 50,000$

utilization rate η : $\eta \times \text{end-time} \approx 250,000 \text{ sec}$
 $= 250,000 \text{ sec}$

② lower bound for 5th waiting time $\leq 5 \text{ sec}$

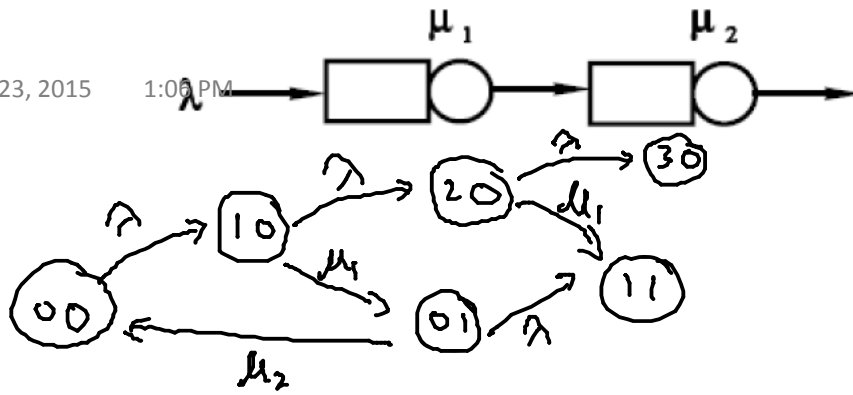
③ process 1 & 2: similar results

process 3 & 4: similar results



N : # of arrivals in first hour

Q: $P(N \leq 2) = P(N=0) + P(N=1) + P(N=2)$



$$(n_1, n_2)$$

$$\pi_i = (1-\rho) \cdot \rho^i$$