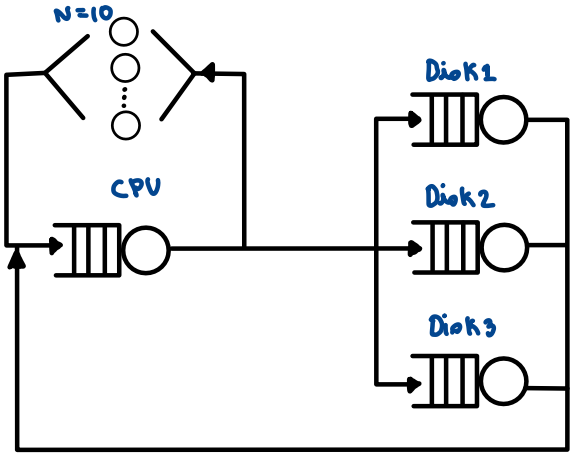

* the throught of disk 3 is 40 request/sec

$X_{disk\,3} = 40$ request/sec

* the service time average request at disk 3 is 0.0225 sec

$E[S_{disk\,3}] = 0,0225$ sec

* the average number of jobs in the system consisting of disk 3 and its queue is 4.

$E[N_{disk\,3}] = 4$ jobs

* what is the utilization of disk 3 ?

$E[S] = \frac{1}{\mu}$ $\quad \rho = \frac{\lambda}{\mu} = \lambda \cdot \frac{1}{\mu} =$

$\rho = \lambda E[S] = X E[S]$

$\rho = 40 \cdot 0.025 = 90\%$ //

* what is the mean time spent queueing at disk 3 ?

$N_3 = X E[T_3]$

$E[T_3] = E[S_3] + E[T_{Q_3}]$

$E[T_{Q_3}] = E[T_3] - E[S_3]$

$E[T_{Q_3}] = 0.1$ sec $- 0.025$ sec

$E[T] = 0.0775$ sec //