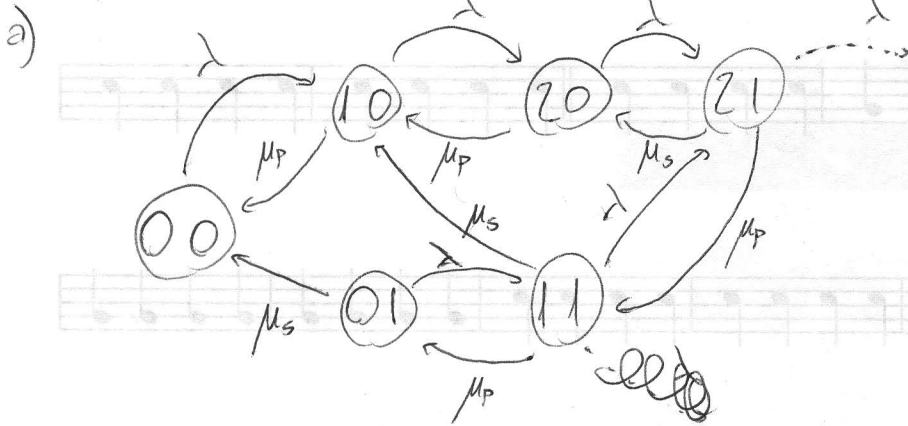


STATO

(# utenti richiamati + coda; # utenti raccomandati)



c)

$$B = \frac{\lambda \cdot b_{00}}{\lambda_{off}} = \frac{\lambda (\pi_{21})}{\lambda (\pi_{00} + \pi_{10} + \pi_{20} + \pi_{11} + \pi_{01} + \pi_{11} + \pi_{21})} = \pi_{21}$$

d)

$$\sum_{i=0}^2 \pi_{i,i} = \pi_{0,0} + \pi_{1,1} + \pi_{2,1}$$

e) Per Little

$$E[N] = \lambda E[T]$$

$$E[N] = 0 \cdot \pi_{0,0} + 1 (\pi_{1,0} + \pi_{1,1}) + 2 (\pi_{2,0} + \pi_{2,1}) + 3 (\pi_{2,1})$$

$$E[T] = \frac{E[N]}{\lambda}$$