Problem 5.1

$S = \{0, 1\}$ 工作　　$T = \{t_0, t_1, t_2\}$ $0$ $1h$ $2h$

$$P = \begin{matrix} \\ 0 \\ 1 \end{matrix} \begin{matrix} \begin{matrix} 0 & 1 \end{matrix} \\ \begin{bmatrix} 1-a & a \\ b & 1-a \end{bmatrix} \end{matrix}$$

Case 1　$a = b = 0$　非怎不变

$$P = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$


$$E(T_i) = (1 - P_{ii})^{-1} = \infty$$

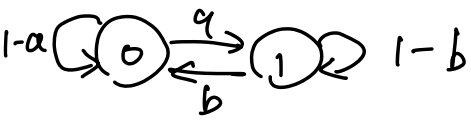
Case 2. $a = b = 1$　必复

$$P = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$$


$$E(T_i) = \frac{1}{1 - P_{ii}} = 1$$

Case 3　$a, b \in (0,1)$

$$P = \begin{bmatrix} 1-a & a \\ b & 1-b \end{bmatrix}$$




$$E(T_i) = \frac{1}{1 - P_{ii}} \qquad E(T_0) = \frac{1}{a} \qquad E(T_1) = \frac{1}{b}$$