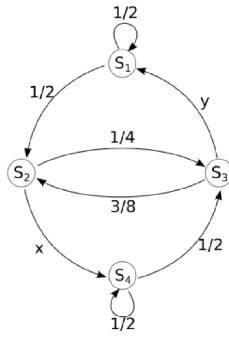


## Sources With Memory

1).



$$S_1 : A_1 A_1$$

$$S_2 : A_1 A_2$$

$$S_3 : A_2 A_1$$

$$S_4 : A_2 A_2$$

$$a) \quad x = ? = \frac{3}{4} \quad (\text{sum of all output probs} = 1)$$

$$y = ? = \frac{5}{8}$$

$$b) \quad [T] = \begin{matrix} & \begin{matrix} S_1 & S_2 & S_3 & S_4 \end{matrix} \\ \begin{matrix} S_1 \\ S_2 \\ S_3 \\ S_4 \end{matrix} & \begin{bmatrix} 1/2 & 1/2 & 0 & 0 \end{bmatrix} \end{matrix}$$