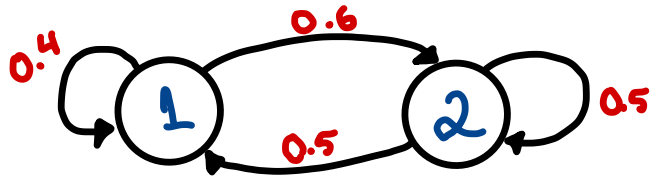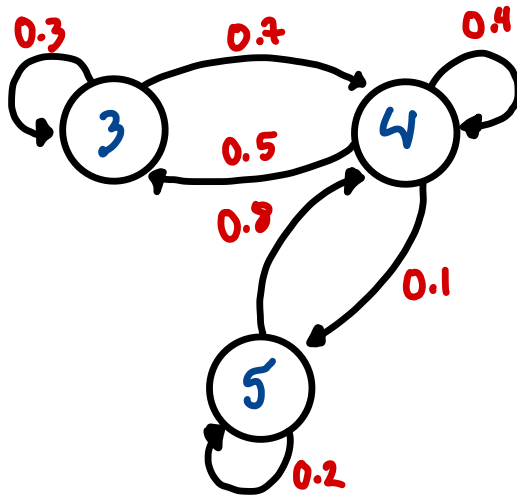# Markov Chain example:

* closed set :
$$\{1,2\}, \{3,4,5\}$$

there is a path between 3 and 5.

3 and 5 are communicated:

$$\begin{cases} 5 \text{ is reachable from } 3 \\ 3 \text{ is reachable from } 5 \end{cases}$$