

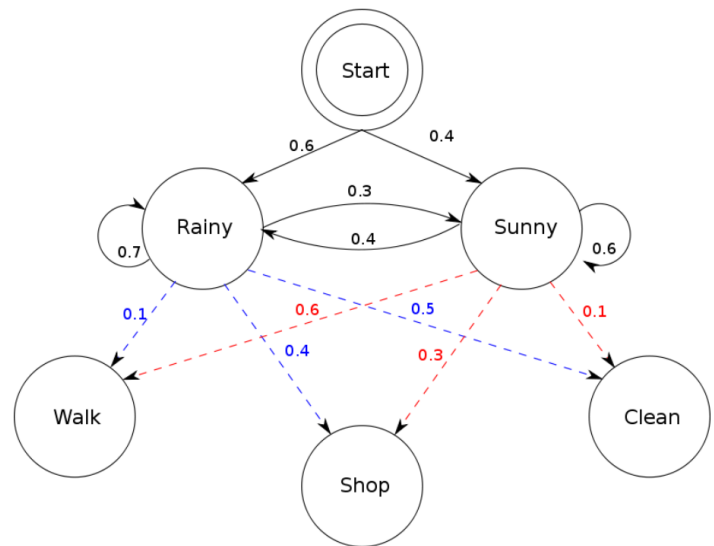
#### Assignment 4 - HMM Question

Consider the HMM on the right.

“Rainy” and “Sunny” are hidden states.

“Walk”, “Shop”, “Clean” are observations.

- Using the Forward Algorithm, compute the probability of observation sequence [Clean, Shop, Walk].
- Using the Viterbi Algorithm, find the most likely sequence of hidden states if we are given the observation sequence [Clean, Shop, Walk].



For both (a) and (b) above, draw their trellis, and show the alphas (Forward Algorithm) and v's (Viterbi Algorithm), similar to the examples on the slides.