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1. Markov Decision Process
 - a. Can be stated as the following MDP problem
 - i. State space: n vertices, including goal vertex g .
 - ii. Action space: all possible edges connected from one vertex to others.
 - iii. Transition function: probability of taking actions from one vertex to others.
 - iv. Reward function: negative value of weight, which denotes cost.
 - b. Multiagent MDP
 - i. Yes, same as single agent MDP, all the agents follow the same path.
 - ii. No, reward function becomes dynamic, computational cost hence increases.
 - c. Run the agent one by one.
2. Partially Observable Markov Decision Process
 - a. False. It should be exponential time in the number of states.
 - b. False. Its linear.
3. Monte Carlo Tree Search
 - a. MCTS will choose Node A as next action. $A=1.5$ $B=1$