## Multi-Agent Reinforcement Learning - Assignment 1

Name and Roll number: Ankur kumar(21043)

Institute/University Name: IISER Bhopal

Program/Stream: DSE

Date of Submission: August 28, 2024

## 1 Question 1

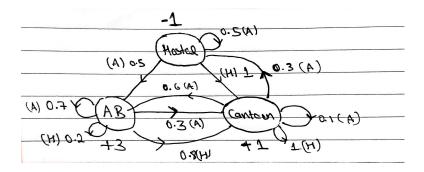


Figure 1: Diagram illustrating the MDP

- The implementations for policy iteration and value iteration can be found on the GitHub repository.
- The results of policy iteration and value iteration are identical because both algorithms converge to the correct value function by satisfying the Bellman equations. They terminate once the optimal policy is achieved. According to both these methods taking the action "attend" in all the states is the optimal policy.

## 2 Question 2

The implementations for policy iteration and value iteration can be found on the GitHub repository.