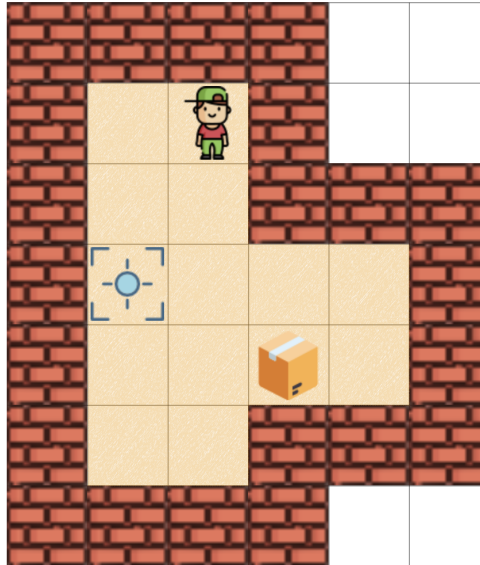


# **DSE 314: Reinforcement Learning**

## **Assignment-3**

### **Warehouse Agent Environment**

The task in this assignment is to create an environment that will be used later to implement Classic RL and Deep RL algorithms. You are required to create a grid world-based environment same as the image provided below with the necessary state-action dynamics (Assignment-2):



#### **Question 1:**

**(50 marks)**

Use the environment created in Assignment-2 to train the agents to make the box reach the goal position, using the following algorithms:

1. On-Policy Monte Carlo
2. Off-Policy Monte Carlo
3. On-Policy TD Control (SARSA)
4. Off-Policy TD Control (Q-Learning)
5. Policy Gradient Method

#### **Question 2:**

**(10 marks)**

Comment on the performance of each algorithm. Figure out the best performing algorithm and give necessary insights.