Q1.
  a) Differentiate Between Episodic and Continuous tasks in context of RL.
  b) What is the role of Discount factor ϒ in calculating the Goal?
  c) Explain the role of Policy π in defining the RL System.
  d) How Policy π and a Better Policy π' are different.

$$2*4$$

Q2. Take an example of a Trash Collector Robot, who will either wait for the new trash or search for the new trash or will go for recharging. Make a Bellman Expectation Equation for such a system. Define the environment state and Agent state with the help of this example.

$$3.5$$

Q3. ε-greedy Policy (Epsilon Greedy Policy) is considered one of the ways to help you defining the trade-off between exploration and exploitation. Discuss in detail the contours of this policy and how we can alter the value of epsilon to take care of the trade-off.

$$3.5$$