

## **ASSIGNMENT #5**

1. Using Reinforcement Learning (RL), implement the following examples:
  - a. Mountain Car trying to go top a hill
  - b. Car Racing
  - c. Roulette
2. Apply Deep Reinforcement Learning (DRL) for solving the above mentioned problems. You may use DQN for implementation.
3. Implement both RL and DRL for finding the shortest path in any user-input graph. Compare the performance between RL and DRL in tabular representation.

You may use the Gym package for the above problems. Refer to the link:  
[https://gym.openai.com/envs/#classic\\_control](https://gym.openai.com/envs/#classic_control)

Save the assignment in a single pdf file with the naming convention “Full Class Roll No\_Full Name.pdf” and upload the report by using the Google form link:

<https://forms.gle/cKYbvSo6r9YHGhCB8>

**SUBMISSION DEADLINE: 25<sup>th</sup> October 2022 Tuesday (11:59 pm) EOD**