NNFS - Exp. No-1: Intelligent Agents

(Posted on <16 September, 2022>, Submission Deadline <7 October, 2022>)

Problem Statement-

In Module-1 we learned a few concepts about intelligent agents and their environments. In this tutorial we'll try our hands-on and check our conceptual understanding using a taxi driver agent problem. We'll begin with ready-made programming package available at the following link-

 $\frac{https://towardsdatascience.com/reinforcement-learning-and-q-learning-an-example-of-the-taxi-problem-in-python-d8fd258d6d45}{}$

(Its older version is available at-

https://towardsdatascience.com/reinforcement-learning-lets-teach-a-taxi-cab-how-to-drive-4fd1a 0d00529)

You can download the code and explore it as mentioned in the link above.

Rubric for Grading Submission

You need to submit your report for evaluation on a scale of 10. The report shall consist of your understanding of the problem, code, results, novelty (if any) and conclusions. Following rubric shall be used for grading your submission-

Marks	Criteria	Exhibits
0	No submission within deadline	-
1-5	Used code in the link as it is without any changes. No novelty. Marks based on the presentation and time of submission.	Successfully installed and executed the code
6-8	Minor changes in the code, time of submission	Demonstrate need and effect of changes
9-10	Major changes in the code, time of submission	Demonstrate need and effect of changes

Note-

You may also explore other intelligent agents freely available on the internet like Atari games. We encourage independent and creative thought processes in reproducing concepts covered in the classroom sessions.