Assignment 3

1. Taxi V3

Reward vs Episode curve

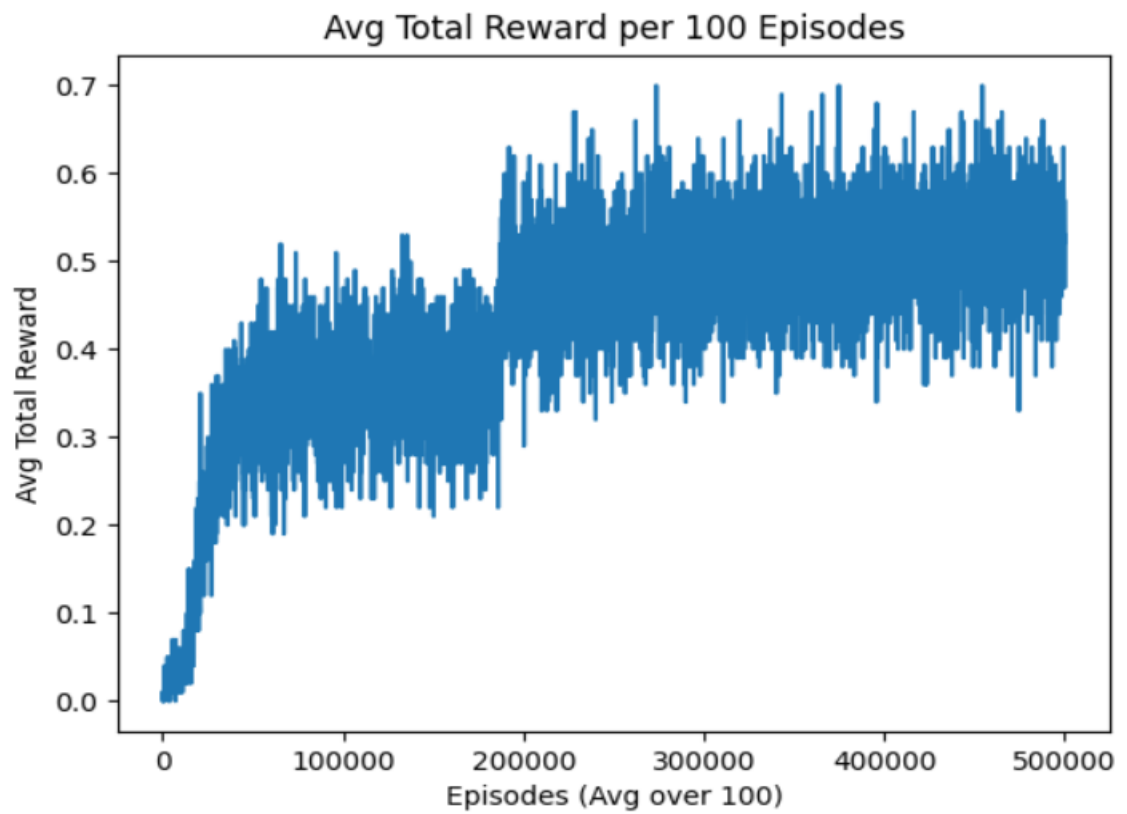Avg Total Reward per 100 Episodes

After 5 Lakh episodes, average reward is 8.1

```
Episode 112300 Avg reward 7.5
Episode 112400 Avg reward 7.38
Episode 112500 Avg reward 7.02
Episode 112600 Avg reward 7.49
Episode 112700 Avg reward 7.28
Episode 112800 Avg reward 7.17
Episode 112900 Avg reward 7.27
Episode 113000 Avg reward 7.21
Episode 113100 Avg reward 7.1
Episode 113200 Avg reward 7.47
Episode 113300 Avg reward 7.04
Episode 113400 Avg reward 8.1
Convergence completed in 187.80 seconds
```

GIF is in the plots folder.

2. **Frozen Lake (When Slippery)**

Avg Total Reward per 100 Episodes

```
472    Episode 497500 Avg reward 0.57
473    Episode 497600 Avg reward 0.49
474    Episode 497700 Avg reward 0.59
475    Episode 497800 Avg reward 0.51
476    Episode 497900 Avg reward 0.46
477    Episode 498000 Avg reward 0.55
478    Episode 498100 Avg reward 0.46
479    Episode 498200 Avg reward 0.55
480    Episode 498300 Avg reward 0.56
481    Episode 498400 Avg reward 0.53
482    Episode 498500 Avg reward 0.5
483    Episode 498600 Avg reward 0.47
484    Episode 498700 Avg reward 0.51
485    Episode 498800 Avg reward 0.47
486    Episode 498900 Avg reward 0.49
487    Episode 499000 Avg reward 0.49
488    Episode 499100 Avg reward 0.56
489    Episode 499200 Avg reward 0.56
490    Episode 499300 Avg reward 0.63
491    Episode 499400 Avg reward 0.58
492    Episode 499500 Avg reward 0.54
493    Episode 499600 Avg reward 0.54
494    Episode 499700 Avg reward 0.52
495    Episode 499800 Avg reward 0.57
496    Episode 499900 Avg reward 0.47
497    Convergence completed in 407.61 seconds
498    (ail722) (base) root@Abhishek:/home/RL/ass3#
```

Average reward = 0.47

Logs and plots/gif are in the folders -> logs and plots respectively.