Autonomous Agents
Report Assignment 2: Single Agent Learning

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1 Introduction

This report has been written for the Master Artificial Intelligence course Autonomous Agents. This report will contain the answers, motivation and explanation for our implementations of the tasks we had to accomplish in our second assignment for this course. These tasks were centered around the topic of 'Single Agent Learning'.

2 Learning algorithms

2.1 (M) Q-Learning

2.2 (M) Experiment with ϵ and optimistic initialization

2.3 (SC) Softmax action selection instead of ϵ-greedy

2.4 (SC) On-policy Monte Carlo Control

2.5 (SC) Off-Policy Monte Carlo Control

2.6 (SC) Sarsa

3 Conclusion