## Reinforcement Learning Exercise 1



## 1 Exploration

Implement the different exploration strategies – UCB, Softmax Action Selection,  $\epsilon$ -greedy, random exploration and decaying  $\epsilon$ -greedy exploration for some schedule of your choice – in exploration.py. Play around with the hyperparameters. Evaluate the exploration strategies on the given toy problem by plotting the regret and compare the results.

## 2 Experiences

Make a post in thread Week 01: Introduction in the forum<sup>1</sup>, where you provide a brief summary of your experience with this exercise and the corresponding lecture.

<sup>1</sup>https://ilias.uni-freiburg.de/goto.php?target=frm\_1380029&client\_id=unifreiburg