EEC 289A: Introduction to RL Winter 2020

Homework 1: Due 10am on 15-Jan.

Write Matlab program to implement ϵ-greedy algorithm and UCB algorithm to reproduce Fig. 2.4 of the textbook. Pack all code into one matlab file (name your code as yourlastname-homework1.m, use the same convention for all future homeworks, just change the homework number). Read the corresponding sections carefully to understand full details of the simulation setup. In the office hours, I and TA will NOT look at your code and will NOT debug it for you. You can discuss with your classmates but all submitted material should be written by you.

Submit your matlab code and report via Canvas before the deadline. No late submission will be accepted. Your report (name it as yourlastname-homework1.pdf) should be a pdf file that contains information about: 1) How you implement the algorithms; 2) The figure from the book and the figure generated by your program; 3) If you are not able to reproduce exactly the same figure, discuss what could the potential issues. Please also include information about how much time your code needs to run in your computer. The TA needs this information, as he will run your code in his computer.