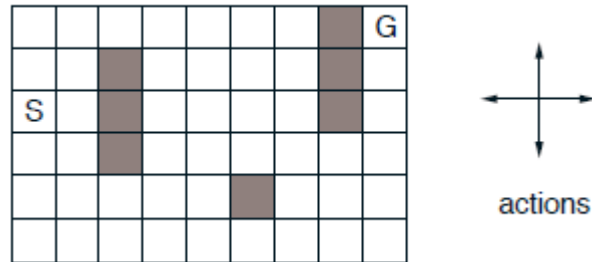


Reinforcement Learning: Programming Exercise #5

In this programming exercise we are going to solve the Dyna Maze problem explained in Example 8.1, page 164 of the textbook.



You need to create the above 6-by-9 grid. The agent starts at location “S” and the goal is to reach the state “G” while avoiding the grey cells.

You are required to implement Dyna-Q algorithm for this problem and reproduce Figure 8.2 with planning steps of $n = 0$ (i.e. no planning, regular Q-learning), $n = 5$, $n = 50$ and comment on the results.