SchoolNova Computer Science 202

Homework 19 (due 3/6/2021)

Task 1

Study the posted code:

robot_recovery_starter_v2_CLASSWORK_simple_one_at_a_time.py

To remind you, the code implements a very simple rule: move the first robot in the list to the exit one at a time (line 156: r = rlocs[0] # move first robot).

Task 2

Will the results change if instead of the first robot in the list, we move the last robot in the list?

Task 3

What about finding a robot closest to the exit and moving that robot?

Task 4

Test your findings above using robotrecovery2.txt and robotrecovery4.txt (you could also check cases 3, 5, 6 but they are very slow). I also recommend disabling all print statements when running robotrecovery4.txt (or other big mazes with a lot of robots).

Task 5*

Feel free to improve the code as you wish.