Discussion

<u>Help</u>

shengtatng ~

<u>Dates</u>



()



<u>Notes</u>

<u>Calendar</u>

Exercise 7

<u>Course</u>

□ Bookmark this page

<u>Progress</u>

Lecture Sequence due Dec 15, 2022 07:30 +08 Completed

Exercise 7

10.0/10.0 points (graded)

Consider once again our permutations of students in a line. Recall the nodes in the graph represent permutations, and that the edges represent swaps of adjacent students. We want to design a weighted graph, weighting edges higher for moves that are harder to make. Which of these could be easily implemented by simply assigning weights to the edges already in the graph?

- A) A large student who is difficult to move around in line.
- B) A sticky spot on the floor which is difficult to move onto and off of.
- C) A student who resists movement to the back of the line, but accepts movement toward the front.



Write a WeightedEdge class that extends Edge. Its constructor requires a weight parameter, as well as the parameters from Edge. You should additionally include a getWeight method. The string value of a WeightedEdge from node A to B with a weight of 3 should be " $A \rightarrow B$ (3)".

```
class WeightedEdge(Edge):
    def __init__(self, src, dest, weight):
        # Your code here
        pass
    def getWeight(self):
        # Your code here
        pass
    def __str__(self):
        # Your code here
        pass
```

```
class WeightedEdge(Edge):
    def __init__(self, src, dest, weight):
        self.src = src
        self.dest = dest
        self.weight = weight
    def getWeight(self):
        return self.weight
    def __str__(self):
        return str(self.src) + "->" + str(self.dest) + " (" + str(self.weight) + ")"
```

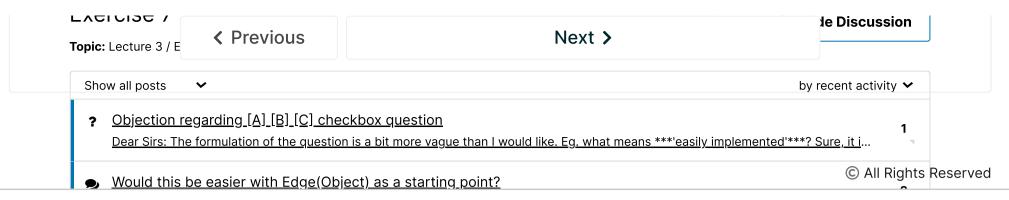
Press ESC then TAB or click outside of the code editor to exit

Correct

Test results

See full output
CORRECT
See full output

Submit





edX

About

Affiliates

edX for Business

Open edX

Careers

News

Legal

Terms of Service & Honor Code

Privacy Policy

Accessibility Policy

Trademark Policy

<u>Sitemap</u>

Connect

<u>Blog</u>

Contact Us

Help Center

<u>Security</u>

Media Kit















© 2022 edX LLC. All rights reserved.

深圳市恒宇博科技有限公司 <u>粤ICP备17044299号-2</u>