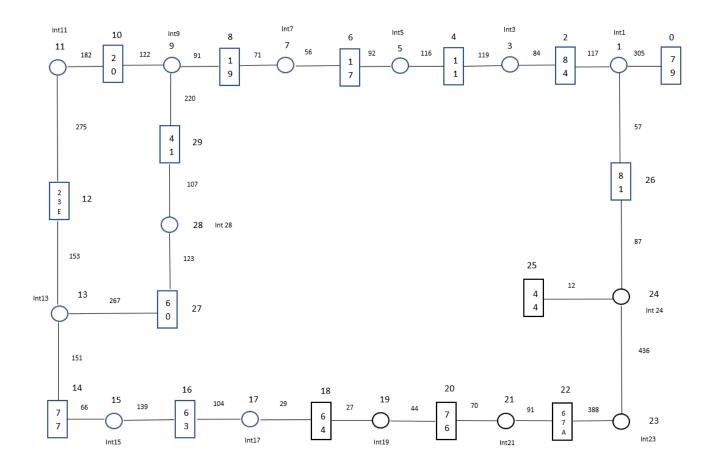
EECE7205: Fundamentals of Computer Engineering Homework 5

Q: Write a program that will help us find the shortest path between any two buildings in the Northeastern University Boston campus. Utilize the Dijkstra's Algorithm to implement the program.

1. The drawing of the undirected graph you created in step (1). Have the graph labeled with the vertices numbers, building character codes, and optionally the intersections character codes. Also, have the edges labeled with the distances you calculated from google map.

Answer:

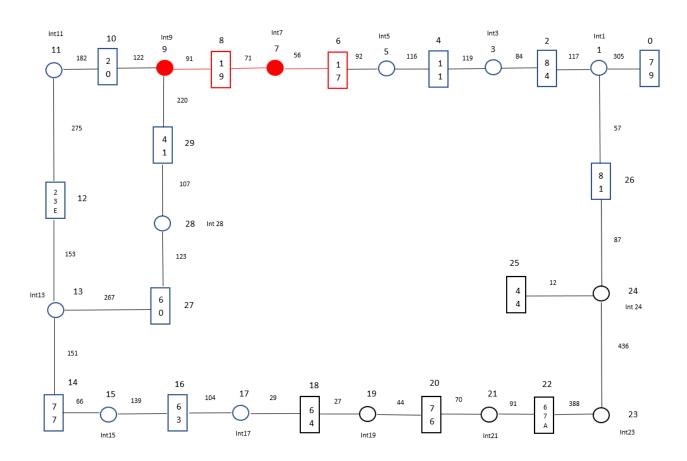
UNDIRECTED GRAPH MAP

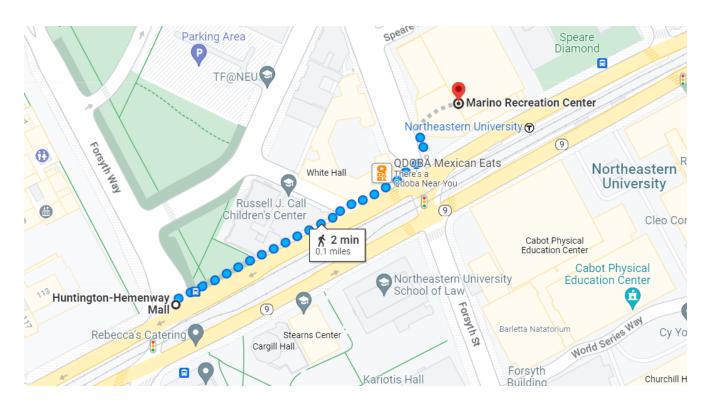


2. In addition to including the screen shots of at least two sample runs of your program, include copies of the graph you created in step (1) on which you need to highlight the shortest path generated by your sample runs. Also, include screenshots of the Google map walking directions correspond to your sample runs.

A: Output Screenshot-1:

Enter start building/intersection : int9
Enter destination building/intersection : 17
Building/intersection int9 matches to vertex: 9
Building/intersection 17 matches to vertex: 6
Distance from Source to Destination is : 218
And the Shortest Path is :
9 -> 8 -> 7 -> 6 ->
mansi@DESKTOP-OKLU3DO:/mnt/c/users/mansi/desktop\$





Output Screenshot-2:

```
Enter start building/intersection : 64
Enter destination building/intersection : 44
Building/intersection 64 matches to vertex: 18
Building/intersection 44 matches to vertex: 25
Distance from Source to Destination is : 1068
And the Shortest Path is :
18 -> 19 -> 20 -> 21 -> 22 -> 23 -> 24 -> 25 ->
mansi@DESKTOP-OKLU3DO:/mnt/c/users/mansi/desktop$
```

