Patrick Ray

Programming Assignment 6

Dr.H

Info 211

Traveling Salesmen with Queue

12/2/16

Description

This assignment was to implement the traveling salesmen problem by using a queue. With the use of lab 5 creating the method made it a little simpler. This program uses the queue and the matrix to compare the distances between each city. The closest city then gets push to the stack and then the program prints the best path from city to city then gets push to the stack and then the program prints the best path from city to cit.

Observation

One problem that was dealt was trying to figure out how to get rid of the null pointer error. It took some time to fix it by adjusting the for loop and adjusting the conditions got it up and running. After the program was finished I noticed that the time efficiency was better than the program on lab 5. The time complexity in this program is O(n^2) where the lab 5 time complexity was O(n!).

Tsp12

run:

0

5

3

8

4

1

11

6

7

10

9

2

Time 44361850

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp 13

run:

0

5

3

8

4

1

11

6

7

10

9

2

12

Time 44974679

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp14

run:

0

5

3

8

4

1

13

11

6

7

10

9

2

12

Time 56039375

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp15

run:

0

5

3

8

4

1

13

14

12

2

9

10

7

6

11

Time 34572847

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp16

run:

0

5

11

8

4

1

9

3

14

13

10

15

12

7

6

2

Time 55742156

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp19

run:

0

5

11

8

4

1

9

3

14

18

15

12

7

6

10

13

17

16

2

Time 35128369

BUILD SUCCESSFUL (total time: 0 seconds)

Tsp 29

run:

0

27

5

11

8

4

20

1

19

9

3

14

18

24

6

22

26

23

7

15

12

17

13

21

16

10

28

25

2

Time 43769121

BUILD SUCCESSFUL (total time: 0 seconds)