

```
run:
Enter number of cities
12
Enter the file name
tsp12.txt
1486082502

Best path and cost
0
5
3
9
10
8
4
2
1
11
6
7
cost = 821
BUILD SUCCESSFUL (total time: 32 seconds)
```

---

```
run:
Enter number of cities
12
Enter the file name
tsp13.txt
1129909349

Best path and cost
0
5
6
8
3
2
11
10
1
4
9
7
cost = 837
BUILD SUCCESSFUL (total time: 13 seconds)
|
```

---

```
run:
Enter number of cities
12
Enter the file name
tsp14.txt
671695333

Best path and cost
0
5
10
9
7
4
2
6
1
11
3
8
cost = 778
BUILD SUCCESSFUL (total time: 12 seconds)
|
```

---

```
run:
Enter number of cities
12
Enter the file name
tsp15.txt
1374488456

Best path and cost
0
5
11
8
4
10
3
2
7
1
6
9
cost = 839
BUILD SUCCESSFUL (total time: 13 seconds)
|
```

---

```
run:
Enter number of cities
12
Enter the file name
tsp16.txt
1361976970

Best path and cost
0
4
3
2
1
9
7
10
6
8
5
11
cost = 962
BUILD SUCCESSFUL (total time: 15 seconds)
|
```

---

```
run:
Enter number of cities
12
Enter the file name
tsp19.txt
3476096642

Best path and cost
0
4
3
2
6
10
8
7
9
11
1
5
cost = 1080
BUILD SUCCESSFUL (total time: 21 seconds)
|
```

---

run:

Enter number of cities

12

Enter the file name

tsp29.txt

1848205367

Best path and cost

0

7

5

6

10

1

9

3

8

2

4

11

cost = 913

BUILD SUCCESSFUL (total time: 25 seconds)

|

run:

Enter number of cities

16

Enter the file name

tsp13.txt

4059774731321

Best path and cost

0

4

3

7

8

2 |

1

6

10

9

11

12

14

15

13

5

cost = 485

BUILD SUCCESSFUL (total time: 67 minutes 49 seconds)

```
run:
Enter number of cities
16
Enter the file name
tsp14.txt
1186605620021

Best path and cost
0
4
8
9 |
6
13
10
12
14
15
7
1
2
11
3
5
cost = 590
BUILD SUCCESSFUL (total time: 19 minutes 59 seconds)
```

```
run:
Enter number of cities
16
Enter the file name
tsp15.txt
645605120332

Best path and cost
0
4
8
1
12
10
11
13
15
9
7
14
2
6
3
5
cost = 733
BUILD SUCCESSFUL (total time: 10 minutes 55 seconds)
|
```

```
run:
Enter number of cities
16
Enter the file name
tsp16.txt
2216102873927

Best path and cost
0
5
11
8
4
2
1
9
12
3
14
13
10
6
15
7
cost = 1222
BUILD SUCCESSFUL (total time: 37 minutes 12 seconds)
```



```
run:
Enter number of cities
16
Enter the file name
tsp19.txt
3906475163250

Best path and cost
0
7
9
15
13
3
2
8
1
12
4
10
5
6
14
11
cost = 1391
BUILD SUCCESSFUL (total time: 65 minutes 17 seconds)
|
```

```
run:
Enter number of cities
16
Enter the file name
tsp29.txt
372251195410

Best path and cost
0
5
4
2
9
6
1
13
3
8
11
14
7
15
10
12
cost = 1022
BUILD SUCCESSFUL (total time: 6 minutes 20 seconds)
```