

Output Screenshot

High-Traffic Locations Today:E F

Location S has garbage level: 0
Location A has garbage level: 14
Location B has garbage level: 10
Location C has garbage level: 86
Location D has garbage level: 75
Location E has garbage level: 22
Location F has garbage level: 90
Location G has garbage level: 98

```
*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
*           Please enter a command:           *
*-----*
*      ( 1 ) Multiple Route Generation          * * * *
*-----* M * A
*      ( 2 ) Single Route Generation           * *
*-----* R * Z
*      ( 3 ) Print Map                         * * * *
*-----*
*      ( 9 ) Exit                             *
*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
|
```

```
*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
*           Please enter a command:           *
*-----*
*      ( 1 ) Floyd-Warshall Rotue              * M  A
*-----*
*      ( 2 ) Djikstra Route                    * *
*-----* R  Z
*      ( 9 ) Return to Main Menu                * * *
*-----*
|
```

Floyd-Warshall | 60% Garbage Level | <40km

-----*Location C*-----

Start:

S -> D -> E -> C

Return

S -> A -> S

Distance from Station: 9.5 km

Total Distance Inc Return: 20.5 km

Total Fuel Cost: \$6.83

Total Maintenance Cost: \$14.35

Total Labor Cost: \$5.12

Total Time: 1.02 hours

-----*Location D*-----

Start:

S -> D

Return

S -> S

Distance from Station: 5.00 km

Total Distance Inc Return: 10.00 km

Total Fuel Cost: \$3.33

Total Maintenance Cost: \$7.00

Total Labor Cost: \$2.50

Total Time: 0.50 hours

-----*Location F*-----

Start:

S -> D -> E -> C -> F

Return

S -> D -> S

Distance from Station: 11.50 km

Total Distance Inc Return: 24.00 km

Total Fuel Cost: \$8.00

Total Maintenance Cost: \$16.80

Total Labor Cost: \$6.00

Total Time: 1.20 hours

-----*Location G*-----

Start:

S -> A -> B -> G

Return

S -> B -> A -> S

Distance from Station: 19.00 km

Total Distance Inc Return: 38.00 km

Total Fuel Cost: \$12.67

Total Maintenance Cost: \$26.60

Total Labor Cost: \$9.50

Total Time: 1.90 hours

* (Y) Return to Main Menu *

* (N) Exit *

```
Process returned 0 (0x0)   execution time : 78.311 s  
Press any key to continue.
```

Generated Djikstra | 40% Garbage Level | <20Km

-----*Location C*-----

Route to location:

S -> D -> E -> C

Return route:

C -> A -> S

Distance from Station: 9.50 km

Total Distance Inc Return: 20.50 km

Total Fuel Cost: \$6.83

Total Maintenance Cost: \$14.35

Total Labor Cost: \$5.12

Total Time: 1.02 hours

-----*Location D*-----

Route to location:

S -> D

Return route:

D -> S

Distance from Station: 5.00 km

Total Distance Inc Return: 10.00 km

Total Fuel Cost: \$3.33

Total Maintenance Cost: \$7.00

Total Labor Cost: \$2.50

Total Time: 0.50 hours

-----*Location F*-----

Route to location:

S -> D -> E -> C -> F

Return route:

F -> D -> S

Distance from Station: 11.50 km

Total Distance Inc Return: 24.00 km

Total Fuel Cost: \$8.00

Total Maintenance Cost: \$16.80

Total Labor Cost: \$6.00

Total Time: 1.20 hours

-----*Location G*-----

Route to location:

S -> A -> B -> G

Return route:

G -> B -> A -> S

Distance from Station: 19.00 km

Total Distance Inc Return: 38.00 km

Total Fuel Cost: \$12.67

Total Maintenance Cost: \$26.60

Total Labor Cost: \$9.50

Total Time: 1.90 hours

* (Y) Return to Main Menu *

* (N) Exit *

```

--->50%---|A* Route|---50.00Km---
Route: S -> D -> E -> C -> F -> G -> B -> A -> S
Distance from Station: 22.75 km
Total Distance Inc Return: 41.75 km
Total Fuel Cost: $13.92
Total Maintenance Cost: $29.22
Total Labor Cost: $10.44
Total Time: 2.09 hours
*      ( Y ) Return to Main Menu      *
*-----*
*      ( N ) Exit                      *
|

```

```

S-----5-----A---8---B
|           |       /|
|           |       6
|           |       |
5           6       4   G
|           |       /|
|           |       /|
D-->2-E->2--C   9
^           |       /
|           2       /
^           |       /
6-<-<-<-<-<-F

*      ( Y ) Return to Main Menu      *
*-----*
*      ( N ) Exit                      *
|

```