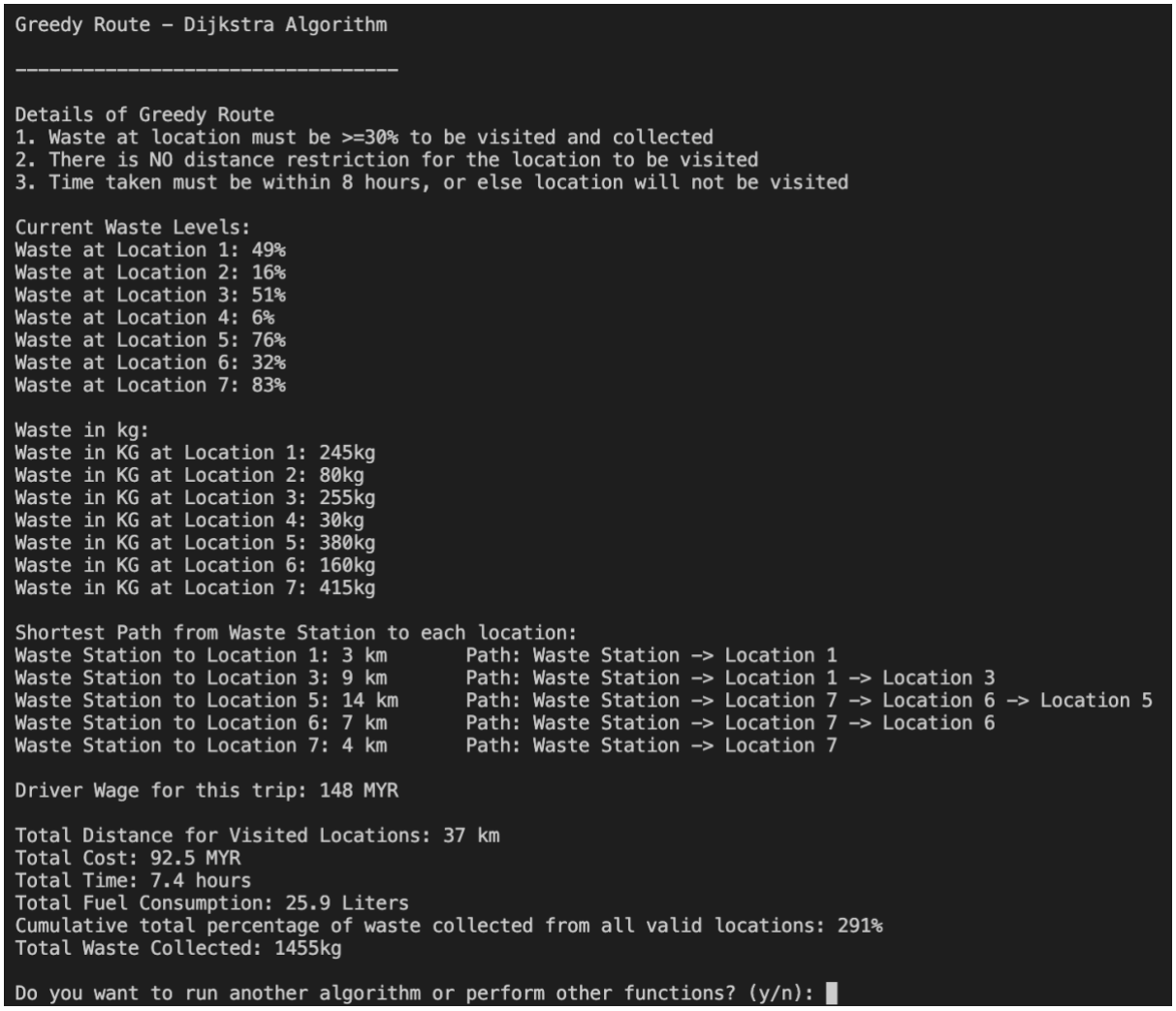
```
------------------------------------------------------------

Welcome to the Waste Management System

Enter your choice of which algorithm you want to run:
1. Non-Optimized Route - Fixed Shortest Path Algorithm
2. Greedy Route - Djikstra Algorithm
3. Optimized Route - Floyd Warshall Algorithm
4. TSP Route - Travelling Salesman Problem Algorithm
5. Print Map - Graph, Distance Matrix
6. Regenerate Waste Levels
7. Exit


Current Waste Levels:
Waste at Location 1: 49%
Waste at Location 2: 16%
Waste at Location 3: 51%
Waste at Location 4: 6%
Waste at Location 5: 76%
Waste at Location 6: 32%
Waste at Location 7: 83%

Waste in kg:
Waste in KG at Location 1: 245kg
Waste in KG at Location 2: 80kg
Waste in KG at Location 3: 255kg
Waste in KG at Location 4: 30kg
Waste in KG at Location 5: 380kg
Waste in KG at Location 6: 160kg
Waste in KG at Location 7: 415kg

Enter your choice (1 - 7): 1
```

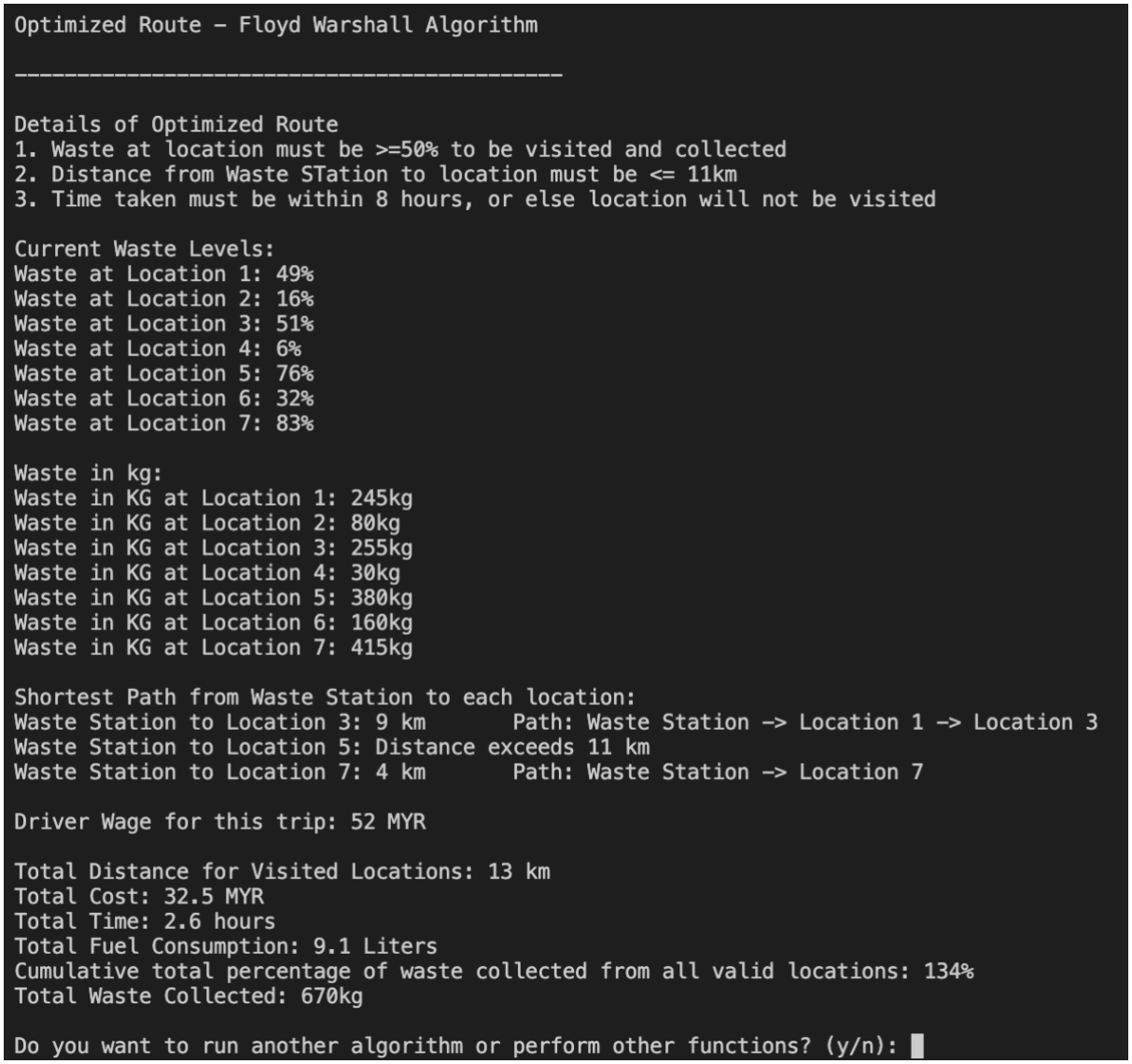
Screenshot 1

```
Non-Optimized Route - Fixed Shortest Path Algorithm

------------------------------------------------------

Details of Non-Optimized Route
1. Waste at location must be >=40% to be visited and collected
2. Distance from Waste Station to location must be <= 30km
3. Time taken must be within 12 hours, or else location will not be visited

Current Waste Levels:
Waste at Location 1: 49%
Waste at Location 2: 16%
Waste at Location 3: 51%
Waste at Location 4: 6%
Waste at Location 5: 76%
Waste at Location 6: 32%
Waste at Location 7: 83%

Waste in kg:
Waste in KG at Location 1: 245kg
Waste in KG at Location 2: 80kg
Waste in KG at Location 3: 255kg
Waste in KG at Location 4: 30kg
Waste in KG at Location 5: 380kg
Waste in KG at Location 6: 160kg
Waste in KG at Location 7: 415kg

Shortest Path from Waste Station to each location:
Waste Station to Location 1: 3 km       Path : Waste Station -> Location 1
Waste Station to Location 3: 9 km       Path : Waste Station -> Location 1 -> Location 3
Waste Station to Location 5: 29 km      Path : Waste Station -> Location 1 -> Location 3 -> Location 2 -> Location 4 -> Location 3 -> Location 6 -> Location 5
Waste Station to Location 7: Distance exceeds 30 km, Location not visited

Driver Wage for this trip: 164 MYR

Total Distance for Visited Locations: 41 km
Total Cost: 102.5 MYR
Total Time: 8.2 hours
Total Fuel Consumption: 4.1 Liters
Cumulative total percentage of waste collected from all valid locations: 176%
Total Waste Collected: 880kg

Do you want to run another algorithm or perform other functions? (y/n):
```

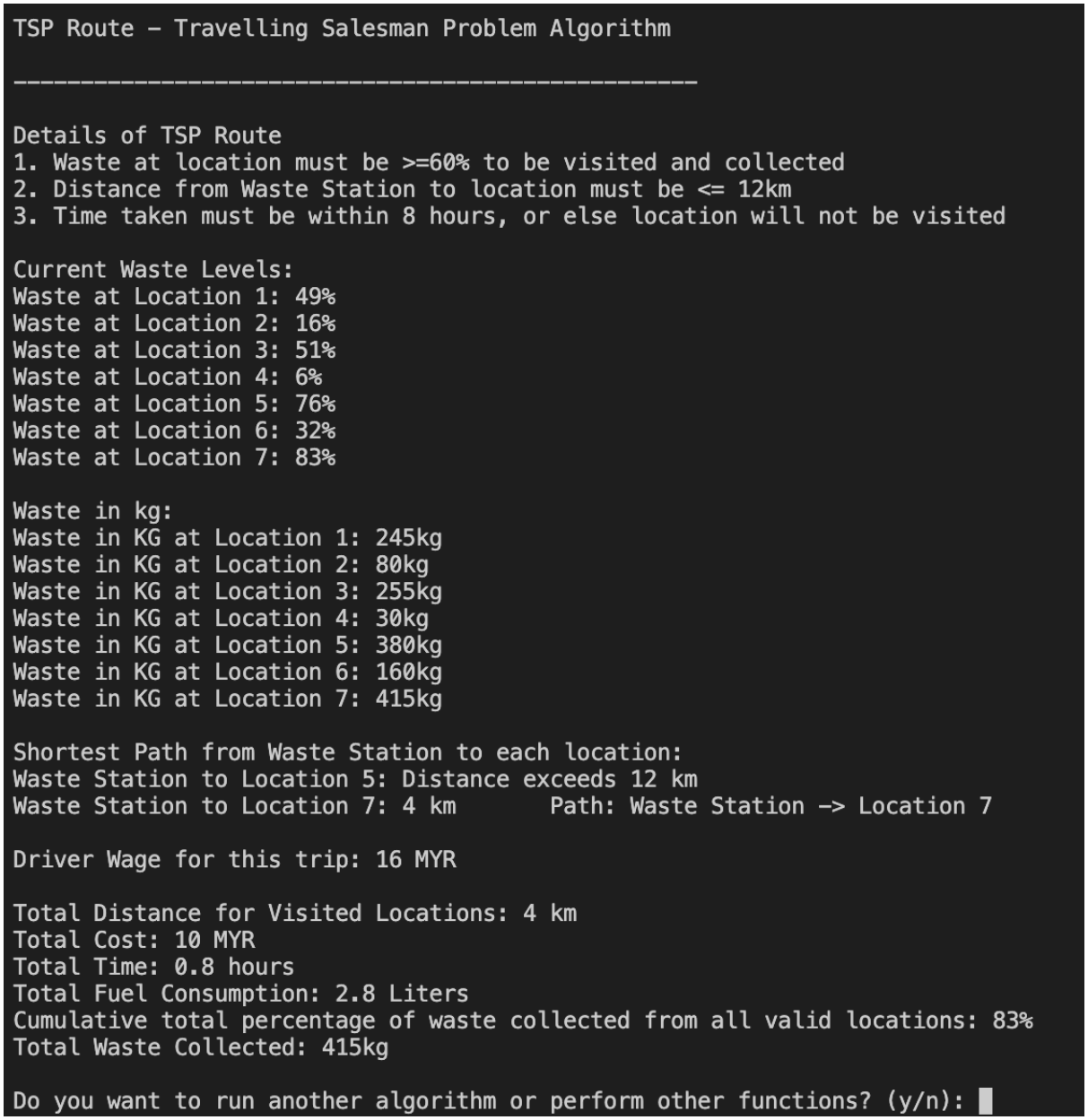
Screenshot 2



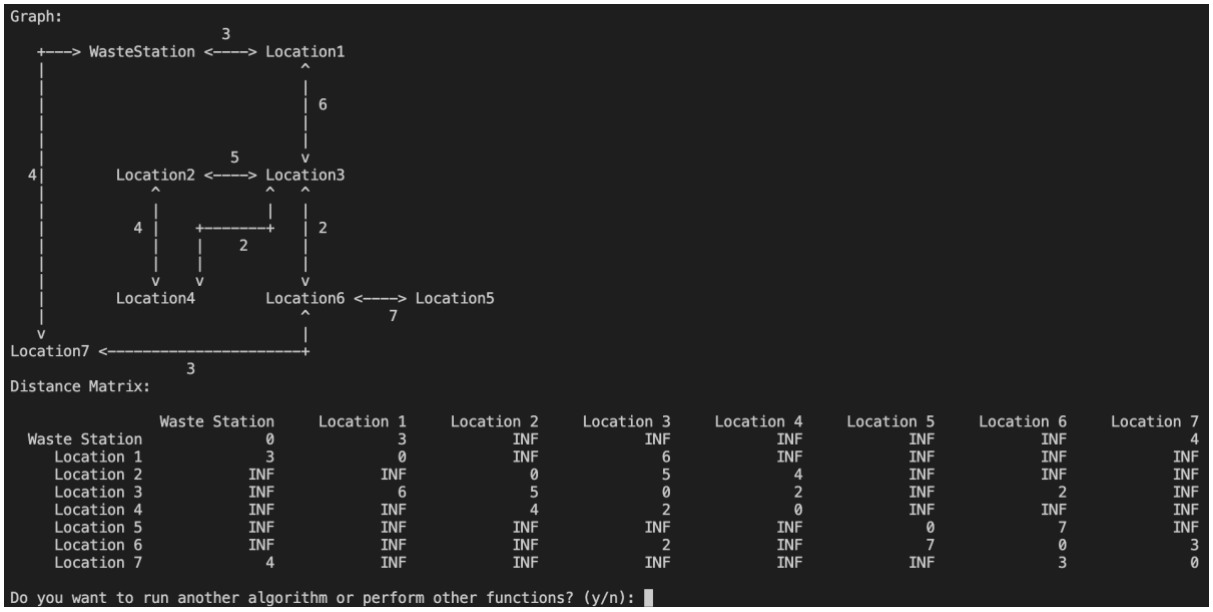

Screenshot 3



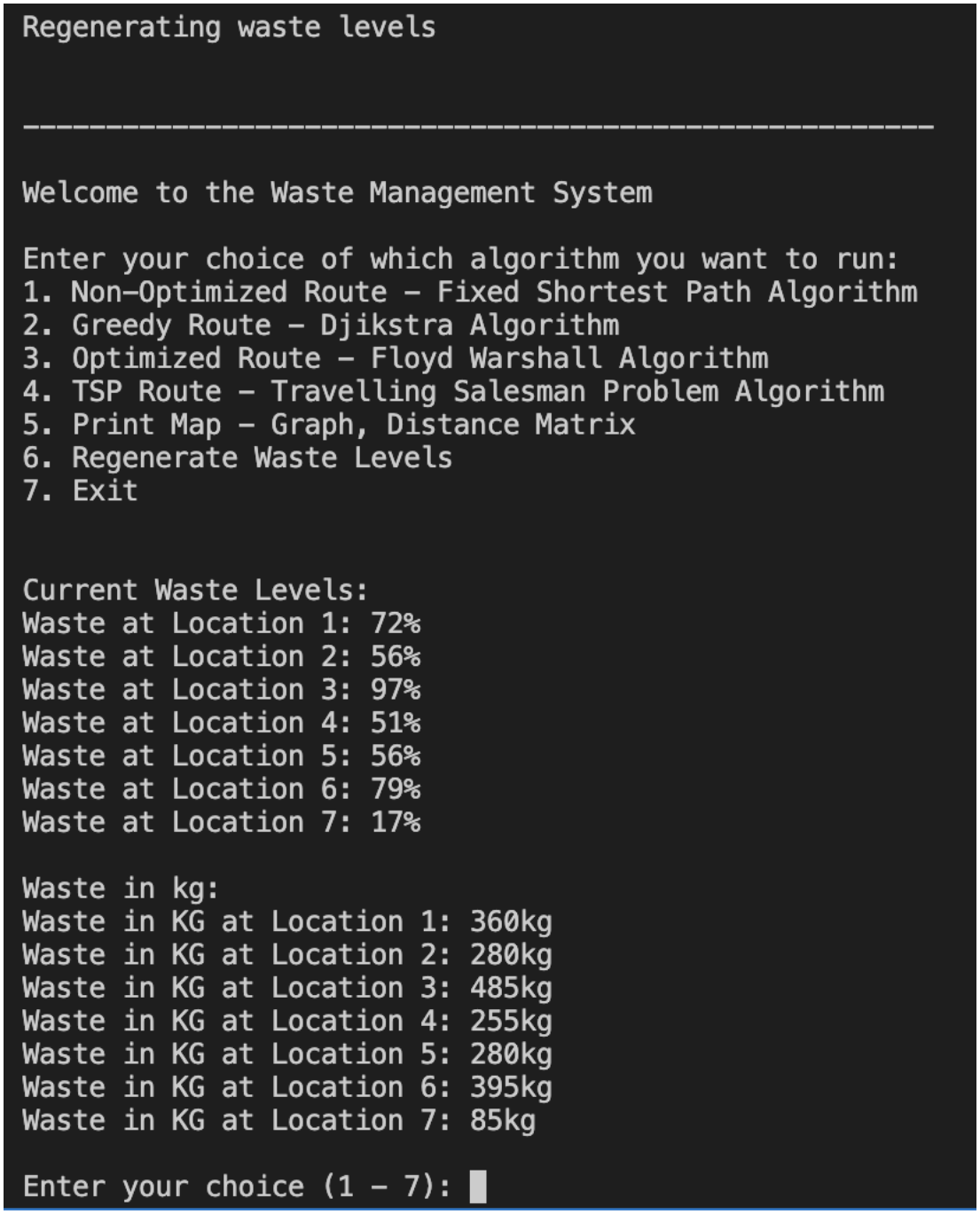

Screenshot 4




Screenshot 5




Screenshot 6




Screenshot 7

```
Welcome to the Waste Management System

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4. TSP Route - Travelling Salesman Problem Algorithm
5. Print Map - Graph, Distance Matrix
6. Regenerate Waste Levels
7. Exit


Current Waste Levels:
Waste at Location 1: 72%
Waste at Location 2: 56%
Waste at Location 3: 97%
Waste at Location 4: 51%
Waste at Location 5: 56%
Waste at Location 6: 79%
Waste at Location 7: 17%

Waste in kg:
Waste in KG at Location 1: 360kg
Waste in KG at Location 2: 280kg
Waste in KG at Location 3: 485kg
Waste in KG at Location 4: 255kg
Waste in KG at Location 5: 280kg
Waste in KG at Location 6: 395kg
Waste in KG at Location 7: 85kg

Enter your choice (1 - 7): 7

Exiting the program
```

Screenshot 8

```
Enter your choice (1 - 7): 9
Invalid choice. Please enter a valid choice.
```

Screenshot 9

```
Do you want to run another algorithm or perform other functions? (y/n): y

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Welcome to the Waste Management System

Enter your choice of which algorithm you want to run:
1. Non-Optimized Route - Fixed Shortest Path Algorithm
2. Greedy Route - Djikstra Algorithm
3. Optimized Route - Floyd Warshall Algorithm
4. TSP Route - Travelling Salesman Problem Algorithm
5. Print Map - Graph, Distance Matrix
6. Regenerate Waste Levels
7. Exit

Do you want to run another algorithm or perform other functions? (y/n): n

Exiting the program
```

Screenshot 10

```
Do you want to run another algorithm or perform other functions? (y/n): o
Invalid choice. Enter again.
Do you want to run another algorithm or perform other functions? (y/n):
```

Screenshot 11