```
======Testing class Map======
Creating Junction 1 at Point (0.00, 0.00)
Creating Junction 2 at Point (0.00, 3.00)
Creating Junction 3 at Point (4.00, 3.00)
Creating Junction 4 at Point (4.00, 0.00)
Creating Road from Junction 1 to Junction 2, length: 3.00
Creating Road from Junction 2 to Junction 3, length: 4.00
Creating Road from Junction 3 to Junction 4, length: 3.00
Creating Road from Junction 4 to Junction 1, length: 4.00
Creating Road from Junction 1 to Junction 3, length: 5.00
Random TrafficLights Junction 1, delay= 2: green light on Road from
Junction 4 to Junction 1
[Road from Junction 1 to Junction 3, Road from Junction 3 to Junction
4]
=======Testing the game=======
Creating Junction 5 at Point (158.40, 408.46)
Creating Junction 6 at Point (337.88, 318.96)
Creating Junction 7 at Point (651.43, 102.01)
Creating Junction 8 at Point (724.79, 314.20)
Creating Junction 9 at Point (243.55, 34.51)
Creating Junction 10 at Point (461.01, 271.29)
Creating Junction 11 at Point (553.94, 149.23)
Creating Junction 12 at Point (486.83, 29.33)
Creating Junction 13 at Point (222.25, 37.97)
Creating Junction 14 at Point (26.57, 410.96)
Creating Road from Junction 5 to Junction 7, length: 580.51
Creating Road from Junction 5 to Junction 8, length: 574.18
Creating Road from Junction 5 to Junction 11, length: 472.92
Creating Road from Junction 5 to Junction 13, length: 375.96
Creating Road from Junction 5 to Junction 14, length: 131.86
Creating Road from Junction 6 to Junction 7, length: 381.29
Creating Road from Junction 6 to Junction 9, length: 299.69
Creating Road from Junction 6 to Junction 10, length: 132.04
Creating Road from Junction 6 to Junction 11, length: 274.76
Creating Road from Junction 6 to Junction 12, length: 325.69
Creating Road from Junction 6 to Junction 13, length: 303.86
Creating Road from Junction 7 to Junction 8, length: 224.51
Creating Road from Junction 7 to Junction 9, length: 413.43
Creating Road from Junction 7 to Junction 10, length: 254.78
Creating Road from Junction 7 to Junction 11, length: 108.32
Creating Road from Junction 7 to Junction 14, length: 697.07
Creating Road from Junction 8 to Junction 6, length: 386.94
Creating Road from Junction 8 to Junction 7, length: 224.51
```

```
Creating Road from Junction 8 to Junction 9, length: 556.62
Creating Road from Junction 8 to Junction 10, length: 267.25
Creating Road from Junction 8 to Junction 14, length: 704.90
Creating Road from Junction 9 to Junction 8, length: 556.62
Creating Road from Junction 9 to Junction 11, length: 330.92
Creating Road from Junction 9 to Junction 14, length: 434.50
Creating Road from Junction 10 to Junction 5, length: 332.25
Creating Road from Junction 10 to Junction 7, length: 254.78
Creating Road from Junction 10 to Junction 11, length: 153.41
Creating Road from Junction 10 to Junction 12, length: 243.34
Creating Road from Junction 10 to Junction 13, length: 333.84
Creating Road from Junction 10 to Junction 14, length: 456.35
Creating Road from Junction 11 to Junction 12, length: 137.41
Creating Road from Junction 11 to Junction 13, length: 349.85
Creating Road from Junction 11 to Junction 14, length: 588.75
Creating Road from Junction 12 to Junction 8, length: 371.18
Creating Road from Junction 12 to Junction 10, length: 243.34
Creating Road from Junction 12 to Junction 11, length: 137.41
Creating Road from Junction 12 to Junction 14, length: 597.90
Creating Road from Junction 13 to Junction 5, length: 375.96
Creating Road from Junction 13 to Junction 6, length: 303.86
Creating Road from Junction 13 to Junction 8, length: 573.46
Creating Road from Junction 13 to Junction 9, length: 21.57
Creating Road from Junction 13 to Junction 12, length: 264.72
Creating Road from Junction 14 to Junction 6, length: 324.62
Creating Road from Junction 14 to Junction 8, length: 704.90
Creating Road from Junction 14 to Junction 11, length: 588.75
Creating Road from Junction 14 to Junction 13, length: 421.21
Sequential TrafficLights Junction 7, delay= 4: green light on Road
from Junction 5 to Junction 7
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 7 to Junction 9
Random TrafficLights Junction 12, delay= 3: green light on Road from
Junction 10 to Junction 12
Creating Vehicle 1, speed: 51, path: [Road from Junction 9 to Junction
11, Road from Junction 11 to Junction 14, Road from Junction 14 to
Junction 6, Road from Junction 6 to Junction 12]
The path has been replaced with the shortest one: [Road from Junction
9 to Junction 11, Road from Junction 11 to Junction 12]
Creating Vehicle 2, speed: 119, path: [Road from Junction 11 to
Junction 12, Road from Junction 12 to Junction 8, Road from Junction 8
to Junction 14, Road from Junction 14 to Junction 8]
Creating Vehicle 3, speed: 87, path: [Road from Junction 11 to Junction
12, Road from Junction 12 to Junction 11, Road from Junction 11 to
Junction 14, Road from Junction 14 to Junction 11]
```

```
Creating Vehicle 4, speed: 113, path: [Road from Junction 13 to
Junction 9, Road from Junction 9 to Junction 11, Road from Junction 11
to Junction 14, Road from Junction 14 to Junction 11]
The path has been replaced with the shortest one: [Road from Junction
13 to Junction 9, Road from Junction 9 to Junction 11]
Creating Vehicle 5, speed: 109, path: [Road from Junction 7 to Junction
14, Road from Junction 14 to Junction 6, Road from Junction 6 to
Junction 10, Road from Junction 10 to Junction 12]
The path has been replaced with the shortest one: [Road from Junction
7 to Junction 11, Road from Junction 11 to Junction 12]
Time: 00:00
Time: 00:01
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is moving on the Road from Junction 11 to Junction 12
Vehicle 3 is moving on the Road from Junction 11 to Junction 12
Vehicle 4 is wating for green light at Junction 9
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Time: 00:02
Vehicle 3 is wating for green light at Junction 12
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Vehicle 4 is wating for green light at Junction 9
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 13 to Junction 9
Time: 00:03
Vehicle 3 is wating for green light at Junction 12
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Vehicle 4 is moving on the Road from Junction 13 to Junction 9
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Random TrafficLights Junction 12, delay= 3: green light on Road from
Junction 6 to Junction 12
Time: 00:04
Vehicle 3 is wating for green light at Junction 12
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 4 is moving on the Road from Junction 9 to Junction 11
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Vehicle 2 is wating for green light at Junction 12
Sequential TrafficLights Junction 7, delay= 4: green light on Road
from Junction 6 to Junction 7
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 6 to Junction 9
Time: 00:05
Vehicle 2 is wating for green light at Junction 12
```

Vehicle 4 is moving on the Road from Junction 9 to Junction 11

```
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 3 is wating for green light at Junction 12
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Time: 00:06
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Vehicle 4 is moving on the Road from Junction 9 to Junction 11
Vehicle 5 is moving on the Road from Junction 7 to Junction 14
Vehicle 3 is wating for green light at Junction 12
Random TrafficLights Junction 12, delay= 3: green light on Road from
Junction 10 to Junction 12
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 8 to Junction 9
Time: 00:07
Vehicle 5 is moving on the Road from Junction 7 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Vehicle 3 is wating for green light at Junction 12
Vehicle 4 arrived to it's destination: Junction 11
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Time: 00:08
Vehicle 5 is moving on the Road from Junction 11 to Junction 12
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Vehicle 3 is wating for green light at Junction 12
Sequential TrafficLights Junction 7, delay= 4: green light on Road
from Junction 8 to Junction 7
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 13 to Junction 9
Time: 00:09
Vehicle 3 is wating for green light at Junction 12
Vehicle 2 is wating for green light at Junction 12
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 5 is moving on the Road from Junction 11 to Junction 12
Random TrafficLights Junction 12, delay= 3: green light on Road from
Junction 6 to Junction 12
Time: 00:10
Vehicle 2 is wating for green light at Junction 12
Vehicle 3 is wating for green light at Junction 12
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 5 arrived to it's destination: Junction 12
Random TrafficLights Junction 9, delay= 2: green light on Road from
Junction 6 to Junction 9
Time: 00:11
Vehicle 1 is moving on the Road from Junction 9 to Junction 11
Vehicle 2 is wating for green light at Junction 12
Vehicle 3 is wating for green light at Junction 12
```

Time: 00:12

Vehicle 3 is wating for green light at Junction 12

Vehicle 2 is wating for green light at Junction 12

Vehicle 1 is moving on the Road from Junction 9 to Junction 11

Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 10 to Junction 7

Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 11 to Junction 12

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 13 to Junction 9

Time: 00:13

Vehicle 3 is moving on the Road from Junction 11 to Junction 12

Vehicle 2 is moving on the Road from Junction 11 to Junction 12

Vehicle 1 is moving on the Road from Junction 9 to Junction 11

Time: 00:14

Vehicle 2 is moving on the Road from Junction 11 to Junction 12

Vehicle 1 is moving on the Road from Junction 11 to Junction 12

Vehicle 3 is moving on the Road from Junction 11 to Junction 12

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 7 to Junction 9

Time: 00:15

Vehicle 2 is moving on the Road from Junction 12 to Junction 8

Vehicle 3 is moving on the Road from Junction 12 to Junction 11

Vehicle 1 is moving on the Road from Junction 11 to Junction 12

Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 6 to Junction 12

Time: 00:16

Vehicle 1 is moving on the Road from Junction 11 to Junction 12

Vehicle 3 is moving on the Road from Junction 12 to Junction 11

Vehicle 2 is moving on the Road from Junction 12 to Junction 8

Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 5 to Junction 7

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 13 to Junction 9

Time: 00:17

Vehicle 2 is moving on the Road from Junction 12 to Junction 8

Vehicle 1 arrived to it's destination: Junction 12

Vehicle 3 is moving on the Road from Junction 11 to Junction 14

Time: 00:18

Vehicle 2 is moving on the Road from Junction 12 to Junction 8

Vehicle 3 is moving on the Road from Junction 11 to Junction 14

Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 6 to Junction 12

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 6 to Junction 9

Time: 00:19

Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Vehicle 3 is moving on the Road from Junction 11 to Junction 14

Time: 00:20

Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Vehicle 3 is moving on the Road from Junction 11 to Junction 14 Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 6 to Junction 7

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 6 to Junction 9

Time: 00:21

Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Vehicle 3 is moving on the Road from Junction 11 to Junction 14 Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 13 to Junction 12

Time: 00:22

Vehicle 3 is moving on the Road from Junction 11 to Junction 14 Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 13 to Junction 9

Time: 00:23

Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Vehicle 3 is moving on the Road from Junction 11 to Junction 14 Time: 00:24

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 8 to Junction 14 Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 8 to Junction 7

Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 13 to Junction 12

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 6 to Junction 9

Time: 00:25

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 14 to Junction 8 Time: 00:26

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 14 to Junction 8 Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 7 to Junction 9

Time: 00:27

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 14 to Junction 8 Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 11 to Junction 12

Time: 00:28

Vehicle 3 is moving on the Road from Junction 14 to Junction 11

Vehicle 2 is moving on the Road from Junction 14 to Junction 8 Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 10 to Junction 7

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 13 to Junction 9

Time: 00:29

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 14 to Junction 8

Time: 00:30

Vehicle 3 is moving on the Road from Junction 14 to Junction 11 Vehicle 2 is moving on the Road from Junction 14 to Junction 8 Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 10 to Junction 12

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 8 to Junction 9

Time: 00:31

Vehicle 3 arrived to it's destination: Junction 11 Vehicle 2 arrived to it's destination: Junction 8

Time: 00:32

Sequential TrafficLights Junction 7, delay= 4: green light on Road from Junction 5 to Junction 7

Random TrafficLights Junction 9, delay= 2: green light on Road from Junction 6 to Junction 9

Random TrafficLights Junction 12, delay= 3: green light on Road from Junction 11 to Junction 12

All vehicles have arrived to their destination.