

Ethic > src > test > java > Unit\_Test\_I

Project

Ethic

Development\_Process

src

test

target

External Libraries

1

import java.util.\*;

2

import org.junit.Test;

3

import org.junit.Assert.\*;

4

import static org.junit.Assert.assertEquals;

5

6

public class Unit\_Test\_I {

7

@

8

Ethic createExecutable(String routes){

9

Ethic ethic = new Ethic();

10

ethic.createGraph(Arrays.asList(routes.split( regex: ",")));

11

return ethic;

12

}

13

@Test

14

public void sample\_input() {

15

Ethic sample = createExecutable( routes: "AB5,BC4,CD8,DC8,DE6,AD5,CE2,EB3,AE7");

16

assertEquals( expected: "9", sample.getDistanceAlongRoute("ABC"));

17

assertEquals( expected: "2", sample.getRoutesWithLimitedStops( start: "C", end: "C", maxNumberOfStops: 3));

18

assertEquals( expected: "7", sample.getRoutesWithLimitedDistance( start: "C", end: "C", maxDistance: 30));

19

assertEquals( expected: "9", sample.getShortestRouteBetweenTwoTowns("A", "C"));

20

}

21

22

/\* Component testing (Testing each function using the graph provided

23

in the problem description \*/

24

25

@Test //< Question One

26

public void distanceAlongRoute() {

27

Ethic sample = createExecutable( routes: "AB5,BC4,CD8,DC8,DE6,AD5,CE2,EB3,AE7");

28

assertEquals( expected: "26", sample.getDistanceAlongRoute("ABCDEB"));

29

assertEquals( expected: "24", sample.getDistanceAlongRoute("DEBCEBCE"));

30

assertEquals( expected: "18", sample.getDistanceAlongRoute("CDCE"));

31

assertEquals( expected: "NO SUCH ROUTE", sample.getDistanceAlongRoute("AC"));

32

assertEquals( expected: "NO SUCH ROUTE", sample.getDistanceAlongRoute("BA"));

33

}

Coverage: Unit\_Test\_I

100% classes, 92% lines covered in 'all classes in scope'

Element	Class, %	Method, %	Line, %
apple			
com			
java			
javafx			
javax			
jdk			
META-INF			
netbeans			
oracle			
org			
resources			
sun			
toolbarButton...			
Ethic	100% (1/1)	88% (8/9)	72% (45/62)
Graph	100% (2/2)	100% (26/26)	98% (194/1...

Run: Unit\_Test\_I.shortestRoutesBetweenTwoTowns Unit\_Test\_I

Tests passed: 6 of 6 tests – 23 ms

Unit\_Test\_I

23 ms

shortestRoutesBetweenTwoTowns 13 ms

routesWithLimitedDistance 3 ms

tokenize 3 ms

distanceAlongRoute 1 ms

routesWithLimitedStops 1 ms

sample\_input 2 ms

The distance of the route ABC.

9

The number of trips starting at C and ending at C with a maximum of 3 stops

2

The number of different routes from C to C with a distance of less than 30

7

The length of the shortest route (in terms of distance to travel) from A to C

9

Graph Has Been Initialized

4: Run

6: Problems

5: Debug

Terminal

Build

Tests passed: 6 (moments ago)

421 chars, 7 line breaks 13:1 LF UTF-8 4 spaces