

## To Develop an E-learning Application Using TDD with TestNG.

### Source Code

```
//Elearning
package com.app.TDD.demo;

import java.util.HashMap;
import java.util.Map;

public class Elearning {

    private Map<String, Integer> getcourse() {

        Map<String, Integer> getcourse = new HashMap<>();

        Map<String, Integer> course1 = null;
        course1.put("Selenium", 10);
        Map<String, Integer> course2 = null;
        course2.put("Junit", 25);
        Map<String, Integer> course3 = null;
        course3.put("Git", 2);

        return getcourse;
    }

    public int getcourse(String Topic) {
```

```

        Map<String, Integer> courseMap = null;
        int count = 0;

        if (Topic.isEmpty()) {
            throw new NullPointerException("Topic Name cannot be
empty..");
        }

        courseMap = getcourse();

        if (!courseMap.containsKey(Topic)) {
            throw new NullPointerException("Topic Name does not exist");
        } else {
            count = courseMap.get(Topic);
        }

        return count;
    }
}

```

//Test Elearning

```
package com.app.TDD.demo;
```

```
import org.testng.Assert;
import org.testng.annotations.Test;

public class TestElearning {

    @Test
    public void findcourse() {

        String Topic = "Selenium";

        int Expectedduration = 10;

        Elearning cs = new Elearning();

        // number of people in the city

        int count = cs.getcourse(Topic);

        System.out.println(count);

        Assert.assertEquals(count, Expectedduration);

    }

    @Test
    public void findEmptyInput() {
```

```
try {  
    String Topic = "";  
    int Expectedduration = 0;  
    Elearning cs = new Elearning();  
  
    int count = cs.getcourse(Topic);  
  
} catch (NullPointerException e) {  
  
    System.out.println("Topic name cannot be empty");  
}  
  
}  
  
}
```