

**Aim:** Perform Unit Testing on a Java program developed for checking whether number is Armstrong or not.

- **ArmOrNot.java**

```
package com.yatrik;
import java.util.*;
public class ArmOrNot {
    public int armstrong(int n)
    {
        int c=0,a,temp;
        temp = n;
        while(n>0)
        {
            a = n%10;
            n = n/10;
            c = c+(a*a*a);
        }
        if(temp == c)
        {
            return 1;
        }
        else
        {
            return 0;
        }
    }
}
```

- **Testing.java(JUnit File)**

```
package com.yatrik;
import static org.junit.jupiter.api.Assertions.*;
import static org.junit.Assert.*;
import org.junit.jupiter.api.Test;
class Testing {
    @Test
    void test() {
        ArmOrNot test = new ArmOrNot();
        int output = test.armstrong(153);
        assertEquals(1,output);
    }
}
```

- Output:

The screenshot displays the Eclipse IDE interface. The main editor shows the source code for 'Testing.java' in the 'com.yatrik' package. The code includes imports for JUnit 5 and a single test method 'test()' that creates an 'ArmOrNot' object, calls 'armstrong(153)', and asserts the result is 1. The left sidebar shows the 'JUnit' view with a green bar indicating a successful run of 1/1 tests, 0 errors, and 0 failures, completed in 0.004 seconds. The bottom console shows the test execution details, including the Java version (10.0.1) and the time (11-Apr-2019, 5:52:22 PM). The status bar at the bottom indicates the file is 'Writable' and 'Smart Insert' is active.

```
1 package com.yatrik;
2
3 import static org.junit.jupiter.api.Assertions.*;
4 import static org.junit.Assert.*;
5
6 import org.junit.jupiter.api.Test;
7
8 class Testing {
9
10     @Test
11     void test() {
12         ArmOrNot test = new ArmOrNot();
13         int output = test.armstrong(153);
14         assertEquals(1,output);
15     }
16
17 }
18
```

JUnit Test Results:

- Runs: 1/1
- Errors: 0
- Failures: 0
- Finished after 0.254 seconds

Test Execution Details:

- <terminated> Testing [JUnit] C:\Program Files\Java\jre-10.0.1\bin\javaw.exe (11-Apr-2019, 5:52:22 PM)
- Picked up \_JAVA\_OPTIONS: -Xmx1024M