

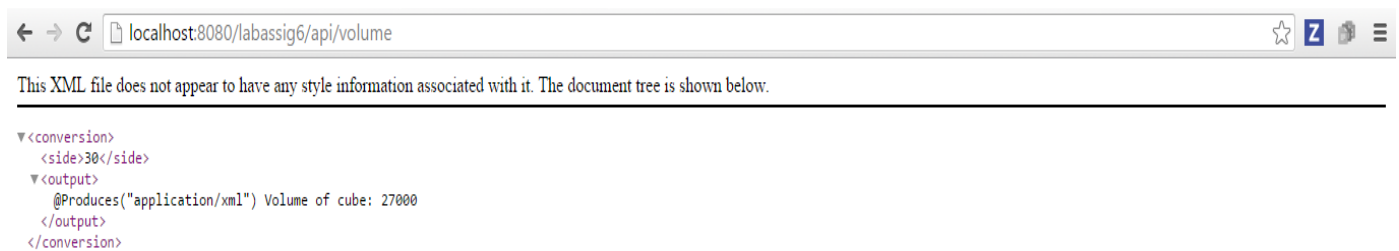
LAB #6

Class Id:19

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In this task I implemented a rest service that calculate the volume of a cube and rectangle according to the provided parameters and the output will be produced by running on web server (Apache Tomcat).

Here, we calculate the volume of a cube by providing its side



Here, we received the output in JSON format.(Volume of a rectangle)



Test Cases : (JUnit Testing)

For Volume of cube:



```
1 package com.labassig6.rest;
2
3 import static org.junit.Assert.*;
4
5
6 public class VolumeTest {
7
8
9
10
11 @Test
12 public void test() {
13     Volume testvol = new Volume();
14     String d = testvol.volumeofCubeInput(30);
15     int z = 27000;
16     String res1 = "@Produces(\"application/xml\") \n Volume of Cube: " + z;
17     System.out.println("@Test Volume(): " + res1 + " = " + d);
18     assertEquals(res1, d);
19 }
20
21
22 }
23
```

For Volume of Rectangle:

```
package com.labassiq6.rest;
import javax.ws.rs.core.Response;

public class VolRectTest {

    @Test
    public void test() {

        VolRect test1 = new VolRect();
        Response rectVoltest = test1.volumeOfRectangleInput(10, 4,3);

        @Test
        public void rectvoltest2() throws JSONException{
            JSONObject jtest = new JSONObject();
            int l = 10;
            int b = 4;
            int h = 3;
            int a = 120;
            jtest.put("Length ", l);
            jtest.put("Breadth ", b);
            jtest.put("Height", h);
            jtest.put("Volume", a);
            String res = "@Produces(\"application/json\") Volume of Rectangle: " + jtest;
            Response d = Response.status(200).entity(res).build();

            Object rectVoltest;
            System.out.println("@Test VolumeofRect(): " + rectVoltest + " = " + d);
            assertEquals(rectVoltest, d);
        }
    }
}
```

Reference:

Code provided in tutorial 6

crunchify.com/create-very-simple-jersey-rest-service-and-send-json-data-from-java-client/

<http://crunchify.com/how-to-read-json-object-from-file-in-java/>

<https://www.youtube.com/watch?v=l8XXfgF9GSc>

<https://www.youtube.com/watch?v=qU9DmFa45rc>