In this Maven Project, I calculate the Volume and Perimeter of a cube.

1. Volume of a cube : length * length * length

Volume when a default value of 1 given



This XML file does not appear to have any style information associated with it. The document tree is shown below.

Volume when a value of 4 is given by the user



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
v<volumeoutput>
     <length>4.0</length>
     <output>Output: 64.0</output>
</volumeoutput>
```

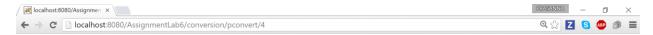
2. Perimeter of a cube: 12 * length

Perimeter of a cube when a default value of 1 is given.



This XML file does not appear to have any style information associated with it. The document tree is shown below.

Perimeter of a cube when a value of 4 is given.

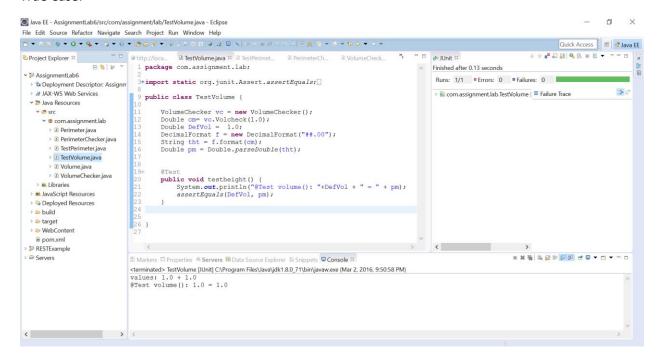


This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
v<perimeter>
  <length>4.0</length>
   <output>Output: Perimeter48.0</output>
  </perimeter>
```

3. Test Cases for Volume

True Case:



False case:

```
a ×
Java EE - AssignmentLab6/src/com/assignment/lab/TestVolume.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
5.9914 × 51 × 65 65 × 51 ×
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                                                                                                                                      □ dv JUnit 🖾
Project Explorer 

□
                                       1 package com.assignment.lab;
                                                                                                                                           Finished after 0.143 seconds

→ 

AssignmentLab6

                                                                                                                                             Runs: 1/1 Errors: 0 Failures: 1
                                       3 import static org.junit.Assert.assertEquals;
  > 😘 Deployment Descriptor: Assignm
                                      9 public class TestVolume {
   > @ JAX-WS Web Services
                                                                                                                                            y ≥ Java Resources
                                                                                                                                                testheight (0.009 s)
                                                                                                                                                                              ijava.lang.AssertionError: expected:<
                                              VolumeChecker vc = new VolumeChecker();

Double cm = vc.Volcheck(1.0);

Double DefVol = 2.0;

DecimalFormat f = new DecimalFormat("##.00");

String tht = f.format(cm);

Double pm = Double.parseDouble(tht);
                                                                                                                                                                              at com.assignment.lab.TestVolume.

→ # com.assignment.lab

         > 

Perimeter.java
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26 }
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PerimeterChecker.java
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TestPerimeter.java
         > 🛽 TestVolume.java
         > 

Volume.iava
         > 🛭 VolumeChecker.java
                                              grest
public void testheight() {
   System.out.println("@Test volume(): "+DefVol + " = " + pm);
   assertEquals(DefVol, pm);
     > M Libraries
   > MayaScript Resources
   > Speployed Resources
  > 🍛 build
   > b target
  > > WebContent

    pom.xml

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➢ RESTExample

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  Servers

    Markers □ Properties ■ Servers ■ Data Source Explorer □ Snippets □ Console □

                                     <terminated> TestVolume (JUnit] C\Program Files\Java\jdk1.8.0_71\bin\javaw.exe (Mar 2, 2016, 9.51:27 PM)
values: 1.0+1.0
@Test volume(): 2.0=1.0
```

4. Test cases for Perimeter

True case:

```
Java EE - AssignmentLab6/src/com/assignment/lab/TestPerimeter.java - Eclipse
                                                                                                                                                                                     ð
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access 🔡 😭 Java EE
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                            □ □ I sttp://loca... ② TestVolume.java ② TestPerimet... ※ ② PerimeterCh... ② VolumeCheck...
                                                                                                                          □ do JUnit 🖾
                                    1 package com.assignment.lab;
Runs: 1/1 Errors: 0 Eailures: 0
                                    3. import static org.junit.Assert.assertEquals; ☐
  > 😘 Deployment Descriptor: Assignm
                                   9 public class TestPerimeter {
                                                                                                                                                                                          ‡ €
                                                                                                                                 > 6 com assignment lab TestPerimete = Failure Trace
  > @ JAX-WS Web Services

→ 

B Java Resources

                                          PerimeterChecker pc = new PerimeterChecker();
Double cm= pc.Pericheck(1.0);
Double beFer = 12.00;
DecimalFormat f = new DecimalFormat("##.00");
String tht = f.format(cm);
Double pm = Double.parseDouble(tht);
    🗸 🕮 src

→ 

⊕ com.assignment.lab

    Perimeter.java
    PerimeterChecker.java

        > 🖸 TestPerimeter.java
        > 1 TestVolume.java
        > 🛭 Volume.java
        > 

VolumeChecker.iava
                                           public void testheight() {
   System.out.println("@Test perimeter(): "+DefPer + " = " + pm);
   assertEquals(DefPer, pm);
     > M Libraries
  > 

May Java Script Resources
  > Sployed Resources
  > 🇀 build
  > 🗁 target
  > 🍅 WebContent
    pom.xml

➢ RESTExample

                                                                                                                                                          <terminated> TestPerimeter [JUnit] C:\Program Files\Java\jdk1.8.0_71\bin\javaw.exe (Mar 2, 2016, 9:52:16 PM)
                                  values: 12.0 + 1.0
@Test perimeter(): 12.0 = 12.0
```

False case:

