**Exercise1: Setting up Junit in java Project**

**Objective:**

Set up Junit in a java project and prepare to write unit tests using the Junit 4 framework.

Steps in setting up Junit:

**Step1**: Create a new Java Project

1. Open the eclipse application.
2. Go to File > New > Java Project.
3. Enter the project name i.e. project\_name.
4. Click finish.

**Step2**: Add Junit Dependency:

1. As I am well-known with eclipse my project uses maven.
2. Right-click on project > configure > convert to maven project.
3. Open pom.xml file.
4. For existing pom.xml add the dependency tag i.e. <dependency> .

The dependency tag to be inserted is:

|  |
| --- |
| <dependency>  <groupId>junit</groupId>  <artifactId>junit</artifactId>  <version>4.13.2</version>  <scope>test</scope>  </dependency> |

**Step3**: Create new Test class.

1. Right-click on src > new > class.
2. Name it CalculatorTest.

CalculatorTest.java:

|  |
| --- |
| import org.junit.Test;  import static org.junit.Assert.assertEquals;  public class CalculatorTest {  @Test  public void testAdd () {  Calculator calc = new Calculator ();  int result = calc.add(2, 3);  assertEquals (5, result);  }  } |

**Step 4**: Create a simple class i.e. to perform addition.

Calculator.java

|  |
| --- |
| public class Calculator {  public int add (int a, int b) {  return a + b;  }  } |

**Step5**: Run the test.

1. Right – click on CalculatorTest.java
2. Choose run as > Junit Test.

The output appears as follows:

