**Exercise 1 : Setting up JUnit**

**Setting Up JUnit with JAR Files (Without Maven/Gradle)**

If you are not using Maven or Gradle, you can set up JUnit in your Java project manually by following these steps:

**1. Download JUnit and Hamcrest JARs**

* Go to the [JUnit 5 Releases page](vscode-file://vscode-app/c:/Users/Kushagra%20Chaturvedi/AppData/Local/Programs/Microsoft%20VS%20Code/resources/app/out/vs/code/electron-sandbox/workbench/workbench.html) or [JUnit 4 Downloads](vscode-file://vscode-app/c:/Users/Kushagra%20Chaturvedi/AppData/Local/Programs/Microsoft%20VS%20Code/resources/app/out/vs/code/electron-sandbox/workbench/workbench.html).
* Download the required JAR files (for JUnit 4: [junit-4.x.x.jar](vscode-file://vscode-app/c:/Users/Kushagra%20Chaturvedi/AppData/Local/Programs/Microsoft%20VS%20Code/resources/app/out/vs/code/electron-sandbox/workbench/workbench.html) and hamcrest-core-x.x.x.jar; for JUnit 5, download [junit-platform-console-standalone-x.x.x.jar](vscode-file://vscode-app/c:/Users/Kushagra%20Chaturvedi/AppData/Local/Programs/Microsoft%20VS%20Code/resources/app/out/vs/code/electron-sandbox/workbench/workbench.html)).

**2. Add JARs to Your Project**

* Place the downloaded JAR files in a [lib](vscode-file://vscode-app/c:/Users/Kushagra%20Chaturvedi/AppData/Local/Programs/Microsoft%20VS%20Code/resources/app/out/vs/code/electron-sandbox/workbench/workbench.html) folder inside your project directory (or anywhere you prefer).

**3. Add JARs to Classpath**

* When compiling and running your tests, include the JAR files in your classpath.
* Example compile command (Windows):

javac -cp ".;lib/junit-4.13.2.jar;lib/hamcrest-core-1.3.jar" Calculator.java CalculatorTest.java

**4. Write Your Test Classes**

* Use @Test annotations and assertions as usual.

**5. Run Your Tests**

* Use the command line as shown above, or configure your IDE to include the JARs in the classpath.

**NOTE** : We can directly setup Jar in VS Code with the help of VS Code Extension such as **Extension Pack for Java and Test Runner for Java.** After selecting the jar icon on sidebar , click on enable Java Test and it will  **automatically** download all required **Junit Jupiter Test Packages** and add It as **.jar** file in lib folder of source file

