

Problem Statement:

Develop a calculator program and implementing arithmetic operation such as Addition , Subtraction , Multiplication , Division additionally we have to perform TDD using Java by Junit testing.

User Stories:

As a user, I want to add two numbers using the calculator.

Test Case:

Input: 2, 3

Expected Output: 5

As a user, I want to subtract one number from another using the calculator.

Test Case:

Input: 5, 3

Expected Output: 2

As a user, I want to multiply two numbers using the calculator.

Test Case:

Input: 2, 3

Expected Output: 6

As a user, I want to divide one number by another using the calculator.

Test Cases:

Input: 6, 3

Expected Output: 2

Input: 6, 0 (to test division by zero handling)

Expected Output: IllegalArgumentException

Report:

TestName	Test Description	Input	Expected output	Acutual Output
testAdd	Perform addition between two numbers	a=2.0 b=3.0	5.0	5.0
testSub	Perform subtraction between two numbers	a=5.0 b=3.0	2.0	2.0
multiplyTest	Perform multiplication between two numbers	a=5.0 b=3.0	15.0	15.0
divisionTest	Perform division between two numbers	a=6.0 b=3.0	2.0	2.0
Dividewith Zero test	Handles the exception when divide a number with zero.	a=6.0 b=0.0	Exception	Excepti on

Summary:

- 1.testAdd() -> **Passed**
- 2.testSub() -> **Passed**
- 3.multiplyTest() -> **Passed**
- 4.divisionTest() -> **Passed**

5.dividewithZero() -> Passed