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**Background of the problem statement:---**

As a developer, write a Java code to create a calculator to perform the four basic arithmetic operations (addition, subtraction, multiplication, and division).

**SIMPLE CALCULATOR: -**

DESCRIPTION

We will implement a basic calculator in Java supporting addition, subtraction, multiplication and division operations.

This calculator work on choice bases. In this calculator we will ask a choice from the users that what action should perform addition, subtraction, multiplication or division.

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**Basic Setup:-**

First, lets show some information about the calculator:

**public** **static** **void** main(String[] args) {

System.***out***.println("---------------------------------- \n" +

"Welcome to Basic Calculator \n" +

"----------------------------------");

System.***out***.println("Following operations are supported : \n" +

"1. Addition (+) \n" +

"2. Subtraction (-) \n" +

"3. Multiplication (\*) \n" +

"4. Division (/) \n");

NOW, initialise the data type, In this calculator we are using only float data type so we can use decimal values also.

 let's use [java.util.Scanner](https://www.baeldung.com/java-scanner) to take the user inputs: ---

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter first number: ");

a = sc.nextFloat();

System.***out***.println("Enter second number: ");

b = sc.nextFloat();

System.***out***.println("1->Add 2->Sub-> 3->Mul 4->Div. ");

System.***out***.println("Enter Your Choice: ");

choice = sc.nextFloat();

As we are taking inputs into the system, we need to validate them.

**Example**:-

If the choice is not "1->Add 2->Sub-> 3->Mul 4->Div then our calculator should call out the invalid choice.

So, let's implement these validations.

**Processing Calculations:--**

we can use an if-else construct to process calculations.

**if** (choice == 1)

System.***out***.println("Addition Of Given Numbers= " + (a + b));

**else** **if** (choice == 2)

System.***out***.println("Subtraction Of Given Numbers= " + (a - b));

**else** **if** (choice == 3)

System.***out***.println("Multiplication Of Given Numbers= " + (a \* b));

**else** **if** (choice == 4)

System.***out***.println("Division Of Given Numbers= " + (a / b));

**else**

System.***out***.println(" Invalid Choice ");

**Requirements that met:**

* The versions of the code tracked on GitHub repositories.

URL: https://github.com/ravii-k/PracticeProjectsP1

* The *calculator* working properly.