1. **Creating an Arithmetic Calculator**

**Code:**

**package** arithmeticCalculator;

**import** java.util.Scanner;

**public** **class** ArithmeticCalculator {

//addition

**public** **int** add(**int** a, **int** b) {

**int** c = a+b;

**return** c;

}

//subtraction

**public** **int** sub(**int** a, **int** b) {

**int** d= a-b;

**return** d;

}

//multiplication

**public** **int** multi(**int** a, **int** b) {

**int** f = a\*b;

**return** f;

}

//division

**public** **float** divide(**int** a, **int** b) {

**float** e = (**float**) a/b;

**return** e;

}

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

**int** p = 0;

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

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

**int** a = sa.nextInt();

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

**int** b = sa.nextInt();

ArithmeticCalculator s= **new** ArithmeticCalculator();

System.***out***.println("Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division. ");

**int** op = sa.nextInt();

**while**(op!=0) {

**if**(op<1 || op>4) {

System.***out***.println("Enter correct choice !");

**break**;

}

**else** **if**(op==1) {

**int** c=s.add(a,b);

System.***out***.println("Addition of numbers is : "+c);

**break**;

}

**else** **if**(op==2) {

**int** d= s.sub(a,b);

System.***out***.println("Subtraction of numbers is : "+d);

**break**;

}

**else** **if**(op==3) {

**int** f= s.multi(a,b);

System.***out***.println("Multiplication of numbers is : "+f);

**break**;

}

**else** **if**(op==4) {

**float** e= s.divide(a,b);

System.***out***.println("Division of numbers is : "+e);

**break**;

}

}

}

}

**Output**:

**1.**

Enter first number :

145

Enter second number :

524

Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division.

1

Addition of numbers is : 669

**2.**

Enter first number :

145

Enter second number :

89

Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division.

2

Subtraction of numbers is : 56

**3.**

Enter first number :

56

Enter second number :

5

Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division.

3

Multiplication of numbers is : 280

**4.**

Enter first number :

546

Enter second number :

123

Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division.

4

Division of numbers is : 4.4390244

**5.**

Enter first number :

56

Enter second number :

12

Enter your choice: 1.Addition 2.Subtraction 3.Multiplication 4.Division.

5

Enter correct choice !