

Assignment - 2

Ans:-

```
import java.util.Scanner;
```

```
class Calculator {
```

```
    public void performAddition(int a, int b) {
```

```
        int result = a + b;
```

```
        System.out.println("Addition: " + result);
```

```
}
```

```
    public void performAddition(double a, double b) {
```

```
        double result = a + b;
```

```
        System.out.println("Addition: " + result);
```

```
}
```

```
    public void performAddition(int a, int b, int c) {
```

```
        int result = a + b + c;
```

```
        System.out.println("Addition: " + result);
```

```
}
```

```
    public void performSubtraction(int a, int b) {
```

```
        int result = a - b;
```

```
        System.out.println("Subtraction: " + result);
```

```
}
```

```
    public void performMultiply(double a, double b) {
```

```
        double result = a * b;
```

```
        System.out.println("Multiplication: " + result);
```

```
}
```

```
public void performDivision (int a, int b) {  
    if (b != 0) {
```

```
        int result = a/b;
```

```
        System.out.println ("Division : " + result);
```

```
    } else {
```

```
        System.out.println ("invalid input");
```

```
}
```

```
public void mainMenu() {
```

```
    System.out.println ("--- welcome to the  
calculator Application ---");
```

```
    System.out.println ("1. Addition");
```

```
    System.out.println ("2. Subtraction");
```

```
    System.out.println ("3. Multiplication");
```

```
    System.out.println ("4. Division");
```

```
    System.out.println ("B - Exit");
```

```
}
```

```
class Main {
```

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

```
        Scanner obj = new Scanner (System.in);
```

```
        Calculator obj2 = new Calculator();
```

```
        obj2.mainMenu();
```

```
        System.out.println ("Enter your choice : ");
```

```
        int choice = obj.nextInt();
```

```
if (choice == 1) {
```

```
System.out.println("Which type of Addition u  
Want to do add : ");
```

```
System.out.println("1. Integer Addition");
```

```
System.out.println("2. Double Addition");
```

```
System.out.println("Enter your choice : ");
```

```
int addchoice = obj.nextInt();
```

```
if (addchoice == 1) {
```

```
System.out.print("Enter 1st number ");
```

④

```
int a = obj.nextInt();
```

```
System.out.print("Enter 2nd number ");
```

```
int b = obj.nextInt();
```

```
System.out.print("Do you want to add 3rd no")
```

(yes/no) ?;

```
String ans = obj.next();
```

```
if (ans.equals("yes")) {
```

```
System.out.print("Enter 3rd number : ");
```

```
int c = obj.nextInt();
```

```
obj 2. performAddition (a,b,c);
```

}

```
else {
```

```
obj 2. performAddition (a,b);
```

}

↑

if (choice == 2) {

System.out.println ("Enter 1st no.");

double a = obj.nextDouble();

System.out.println ("Enter 2nd no.");

double b = obj.nextDouble();

obj2.performAddition (a, b);

}

}

if (choice == 2) {

System.out.println ("Enter 1st no.:");

int a = obj.nextInt();

System.out.println ("Enter 2nd no.");

int b = obj.nextInt();

obj2.performSubtraction (a, b);

}

if (choice == 3) {

System.out.println ("Enter 1st no.:");

double a = obj.nextDouble();

System.out.println ("Enter 2nd no.:");

double b = obj.nextDouble();

obj2.performMultiply (a, b);

}

if (choice

```
if (choice == 4) {  
    System.out.println ("Enter 1st no.:");  
    int a = obj.nextInt();  
    System.out.println ("Enter 2nd no.:");  
    int b = obj.nextInt();  
    obj2.performDivision(a, b);  
}
```

```
if (choice == 5) {  
    System.out.println ("Exiting the Application.  
    Good Bye!");  
    System.exit(0);  
}
```

```
else {  
    System.out.println ("Invalid Input");  
}  
}
```