

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 performSubstraction (int a, int b) {
```

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

```
        System.out.println("Substraction: " + 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 ("--- welcom to the  

        calculator Application ---");
    System.out.println ("1. Addition");
    System.out.println ("2. Substraction");
    System.out.println ("3. Multiplication");
    System.out.println ("4. Division");
    System.out.println ("5. Exit");
}
    
```

```

class Main {
    public static void main (String[] args) {
        Scanner obj1 = new Scanner (System.in);
        Calculator obj2 = new Calculator();
        obj2.mainMenu();
        System.out.println ("Enter your choice:");
        int choice = obj1.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.println("Enter 1st number ");
    }
    
```

```

        int a = obj.nextInt();
        System.out.println("Enter 2nd number ");
        int b = obj.nextInt();
        System.out.println("Do you want to add 3rd no  

        (yes/no) ");
    
```

```

        String ans = obj.next();
        if (ans.equals("yes")) {
            System.out.println("Enter 3rd number ");
            int c = obj.nextInt();
            obj2.performAddition(a, b, c);
        }
    
```

```

        else {
            obj2.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();  
    obj.performDivision(a, b);  
}
```

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

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

```
}
```