

Lab Number:	1
Student Name:	Omkar Santosh Mundhe
Roll No :	20

Title:

To Add Two Numbers, Print Number Entered by User, Swap Two Numbers, check Whether Number is Even or Odd

1.1 Implement using C++

1.2 Implement using Java

Learning Objective:

- Students will be able to write C++ and java program for simple arithmetic operations and take input from user.

Learning Outcome:

- Ability to execute a simple C++ and Java program with and without any inputs to the program.
- Understanding the constructs in C++ and Java.

Course Outcome:

ECL304.1	Understand object-oriented programming concepts and implement using C++ and Java
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Theory:

Difference between procedural and object oriented language

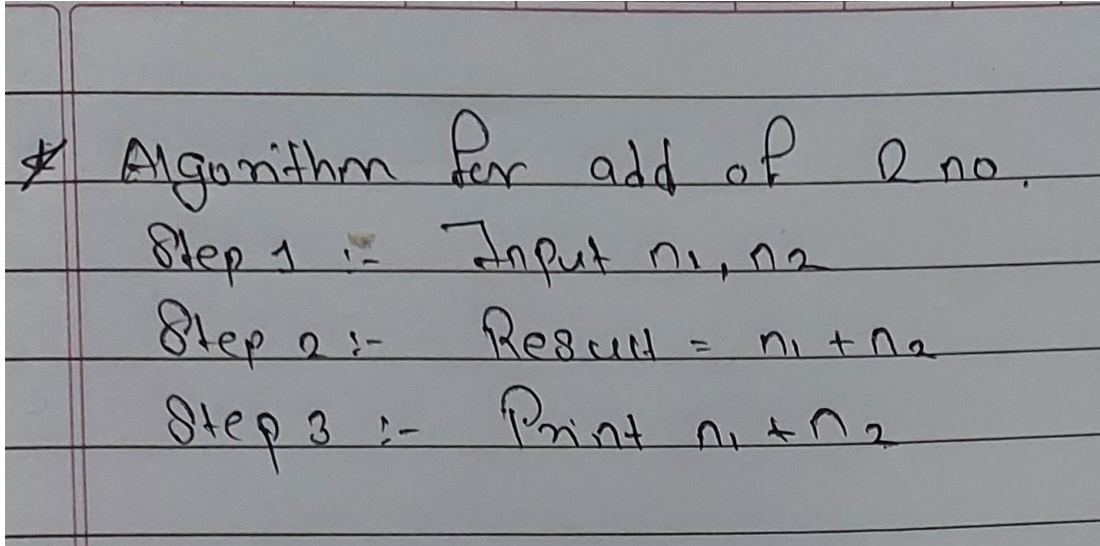
Application of object orientation

Brief introduction to C++ and Java

JAVA PROGRAMS

1. TO ADD TWO NUMBERS

ALGORITHM:



PROGRAM:

//To Add Two Numbers

```
public class Main
```

```
{
```

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

```
    {
```

```
        int x = 14; int y = 19;
```

```
        int sum = x + y ;
```

```
        System.out.println("x + y =" +sum);
```

```
    }
```

```
}
```

OUTPUT:

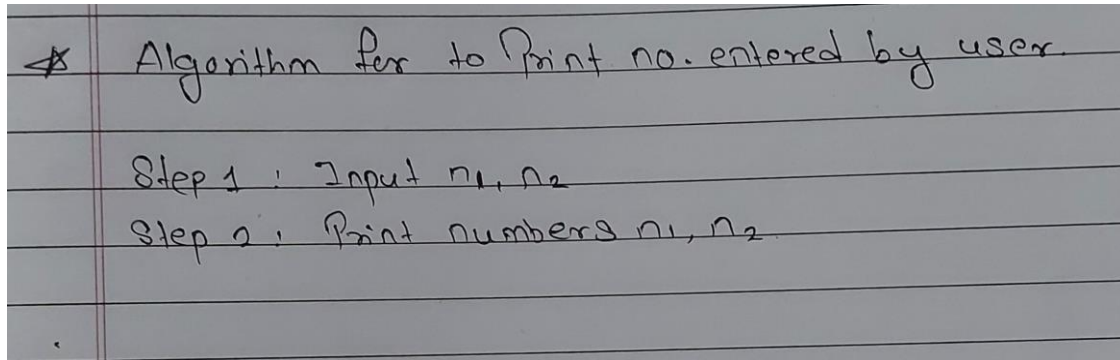
Output

Clear

```
java -cp /tmp/OJfM5bJn9a Main  
x + y =33
```

2. TO PRINT NUMBERS ENTERED BY USER

ALGORITHM:



+

PROGRAM:

```
import java.util.*;
```

```
public class MyClass {
```

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

```
        int n1, n2, temp;
```

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

```
        System.out.println("input number 1");
```

```
        n1=sc.nextInt();
```

```
        System.out.println("input number 2");
```

```
        n2=sc.nextInt();
```

```
        System.out.println(" n1 + n2=" +(n1+n2));
```

```
    }
```

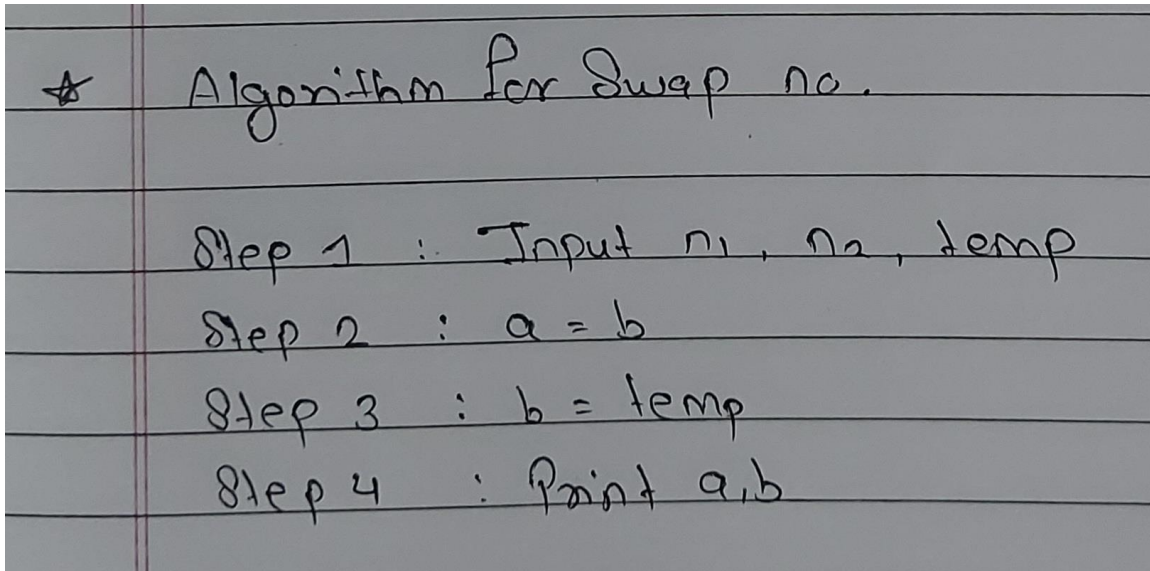
```
}
```

OUTPUT:

```
input number 1  
input number 2  
n1 + n2=10
```

3. TO SWAP TWO NUMBERS

ALGORITHM:



PROGRAM:

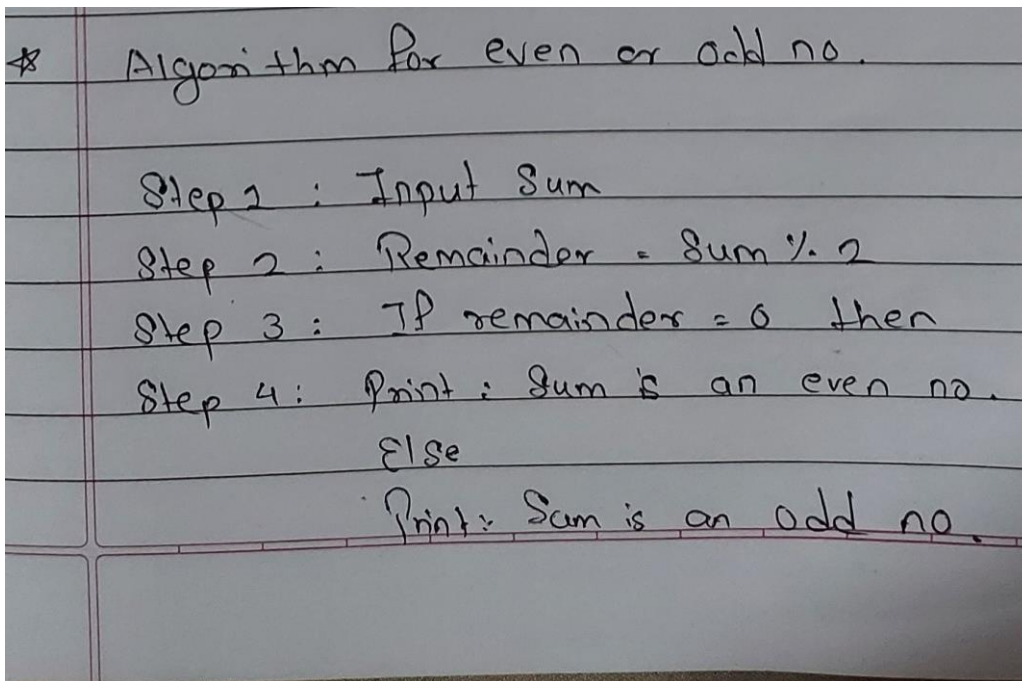
```
//to swap two numbers public class Main
public class main{
    public static void main(String[] args){
        int n1 = 45, n2 = 56;
        System.out.println("Before swapping");
        System.out.println("First number = " + n1);
        System.out.println("Second number = " + n2);
        n1 = n1 - n2;
        n2 = n1 + n2;
        n1 = n2 - n1;
        System.out.println("After swapping");
        System.out.println("First number = " + n1);
        System.out.println("Second number = " + n2);
    }
}
```

OUTPUT:

Output	Clear
<pre>java -cp /tmp/OJfM5bJn9a main Before swappingFirst number = 45 Second number = 56 After swapping First number = 56 Second number = 45 </pre>	

4.TO CHECK WHETHER NUMBER IS EVEN OR ODD

ALGORITHM:



PROGRAM:

```
import java.util.Scanner;

public class EvenOdd {

    public static void main(String[] args) {

        Scanner reader = new Scanner(System.in);

        System.out.print("Enter a number: ");
        int num = reader.nextInt();

        if(num % 2 == 0)
            System.out.println(num + " is even");
        else
            System.out.println(num + " is odd");
    }
}
```


OUTPUT:

Output

Clear

```
java -cp /tmp/OJfM5bJn9a EvenOdd
Enter a number: 45
45 is odd
|
```

