Lab Number:	**1**
Student Name:	**Moozhayil Aditya Saju**
Roll No :	**3**

Title:

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

- Implement using C++
- 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: Understand object oriented programming concepts and implement using C++ and JAVA

Theory:

Difference between procedural and object

oriented language

Application of object orientation

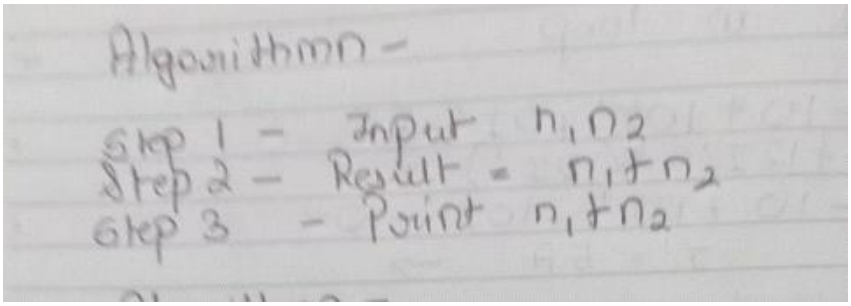
Brief introduction to C++ and Java

JAVA PROGRAMS

- **TO ADD TWO**

NUMBERS

ALGORITHM:



PROGRAM:

```
//To Add Two Numbers


public class Main
{

        public static void main(String[] args)
        {   int x
        = 15;
              int y
        =16;
```

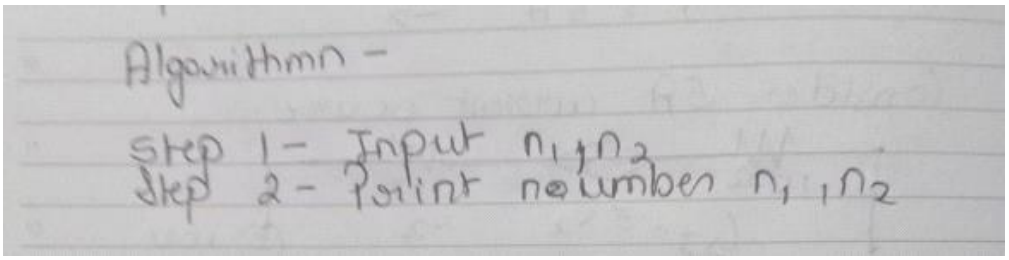
```
        int sum = x + y ;
            System.out.println("x + y =" +sum);
    }

}
```

OUTPUT:

```
Number 1 = 15 Number 2 = 16

Addition of both numbers is:
```

- **PRINT NUMBERS ENTERED**

BY USER ALGORITHM:



PROGRAM:

Import java.util.Scanner;

```
Public class Lab1 {

Public static void main(String[] args)

Scanner sc = new Scanner(System.in); // Create a Scanner
object

 /* System.out.println(“Enter username”);

  String userName = sc.nextLine(); // Read user input

  System.out.println(“Username is: “ + userName); // Output user
  input

  Int n1,n2,temp;

  System.out.println(“Enter first number”);

  N1=sc.nextInt();
```

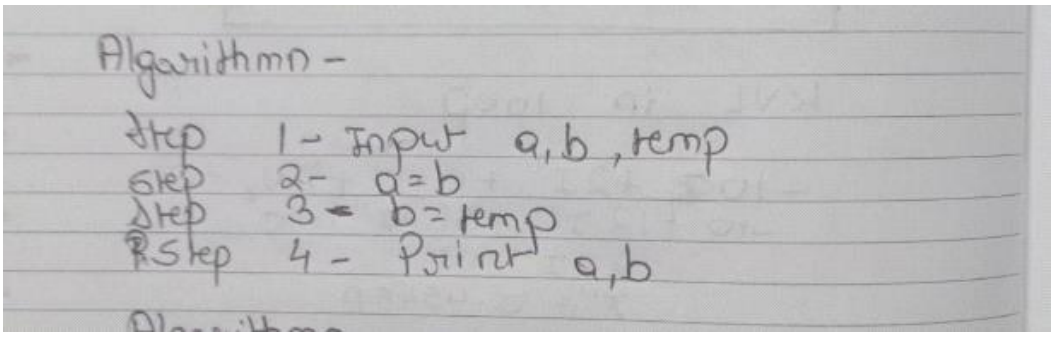
```
  System.out.println(“Enter second number”);

  N2=sc.nextInt();

}

}
```

OUTPUT:

```
Enter first number
15
Enter second number
16
```

• **To SWAP TWO NUMBERS:**

Algorithmn:



PROGRAM:

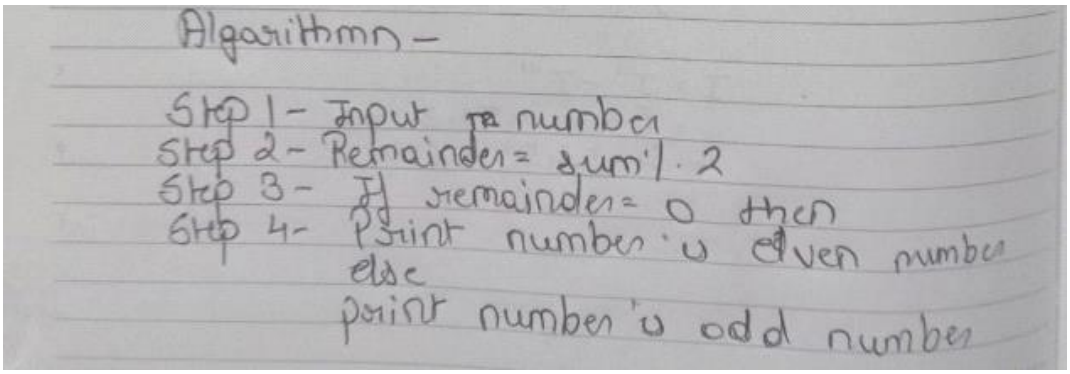
```
//to swap two numbers
public class Main
{ public static void main(String[] args)
        { int n1 = 15, n2 = 16;


      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:

- **TO CHECK WHETHER NUMBER IS**

EVEN OR ODD ALGORITHM:



PROGRAM:

```
//to check whether no is even or
odd. public class Main
{ public static void main(String[] args)


    {
    // Declare the integer
variable int num = 22;

    // If condition to check if the remainder is
zero if (num % 2 == 0)
    {

      // If remainder is zero then this number is even


      System.out.println("Entered Number is Even");
    }

    else
```

```
    {

        // If remainder is not zero then this number is
        // odd
        System.out.println("Entered Number is Odd");
    }

     }
}
```

OUTPUT:

```
 EVEN/ODD

22 is Even
```