

Lab Number:	2
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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

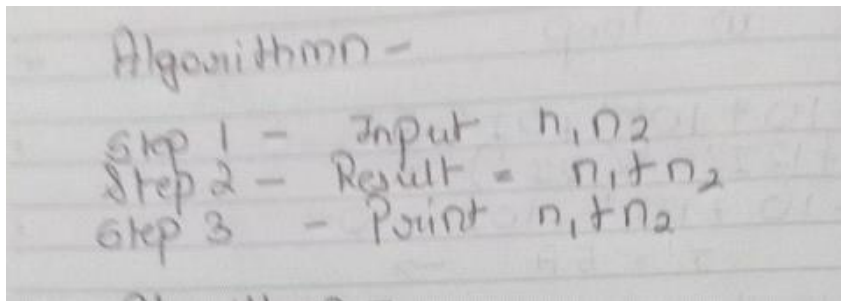
Brief introduction to C++ and Java

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);  
    }  
  
}
```

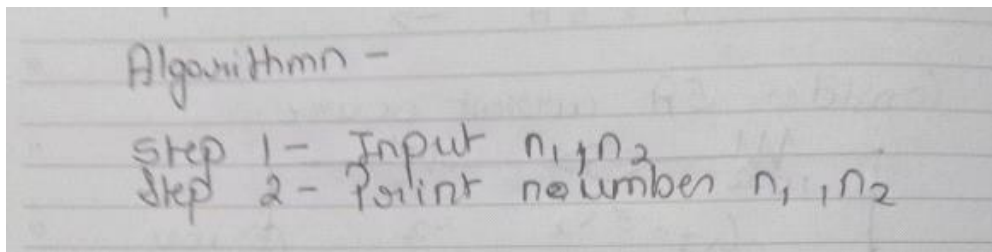
OUTPUT:

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
```

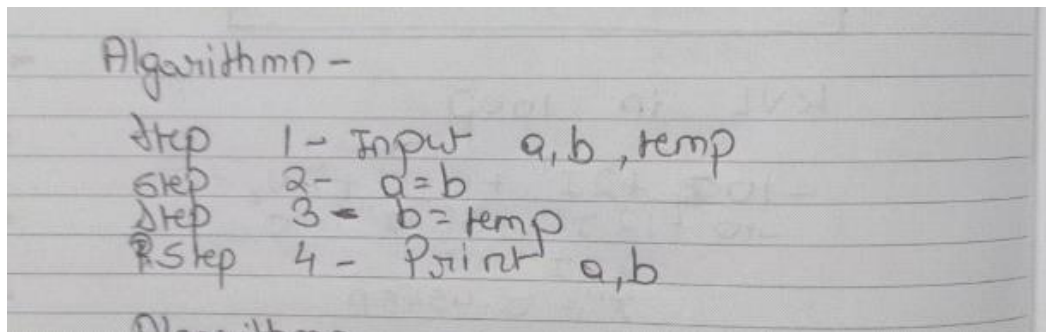
```
15
```

```
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;

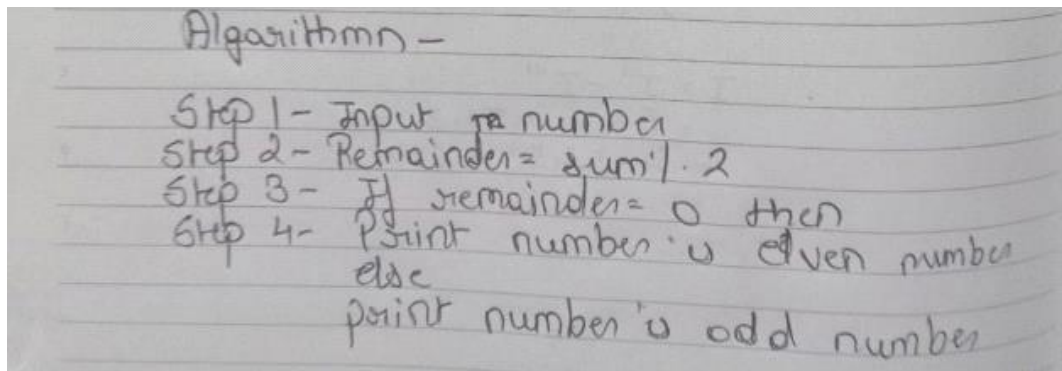
n1 = n2 - n1;

```
        System.out.println("After  
swapping"); System.out.println("First  
number = " + n1);  
        System.out.println("Second number = " + n2);  
  
    }  
}
```

OUTPUT:

```
SWAPPING After swapping Number 1 = 16 Number 2 =  
15
```

- **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

|