

<b>Lab Number:</b>	<b>1</b>
<b>Student Name:</b>	<b>KSHITIJ PRASAD BARE</b>
<b>Roll No :</b>	<b>14</b>

### **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**

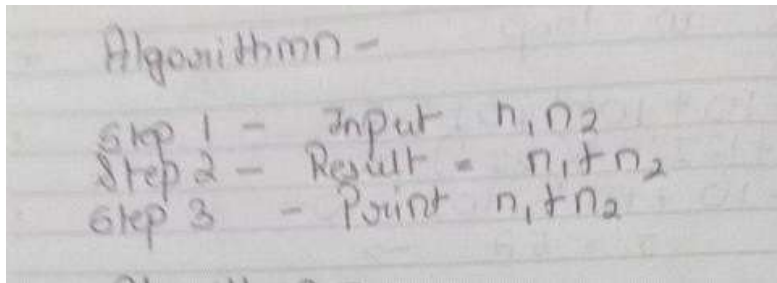
## **Application of object orientation**

### **Brief introduction to C++ and Java**

#### **C++ PROGRAMS**

- **TO ADD TWO  
NUMBERS**

#### **ALGORITHM:**



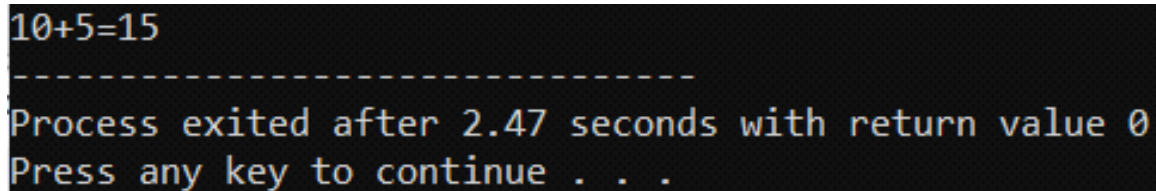
#### **PROGRAM:**

```
//To Add Two  
Numbers  
#include<iost  
ream> using  
namespace  
std;
```

```
int main()
{
    int n1, n2,
    result;
    n1=10;
    n2=5;
    result=n1+n2;
    cout << n1 <<"+" << n2 <<
    "=" << result; return 0;

}
```

### **OUTPUT SCREENSHOT:**

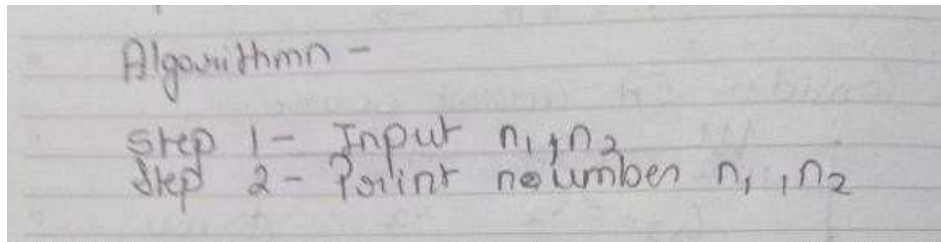


```
10+5=15
-----
Process exited after 2.47 seconds with return value 0
Press any key to continue . . .
```

### **• TO PRINT NUMBERS**

**ENTERED BY USER**

**ALGORITHM:**



### **PROGRAM:**

// Print Number

Entered by User

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int num1,num2;
```

```
    cout << "enter 2
```

```
    numbers"; cin >>
```

```
    num1 >> num2;
```

```
    cout << "user entered numbers are:" << num1
```

```
    << " and " << num2; return 0;
```

```
}
```

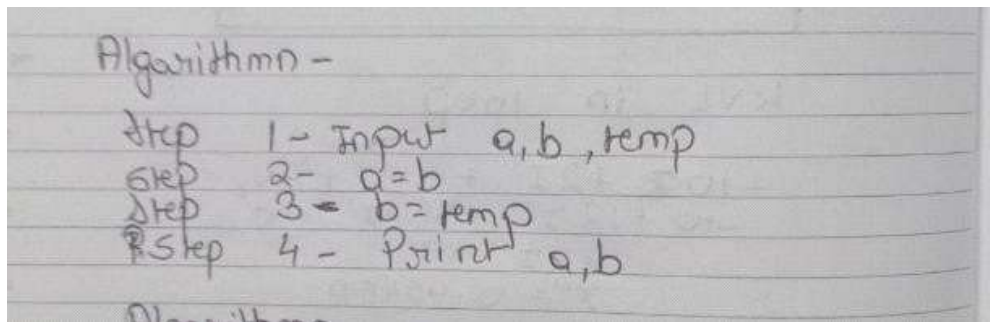
## OUTPUT SCREENSHOT:

```
enter 2 numbers 21
31
user entered numbers are:21 and 31
-----
Process exited after 13.75 seconds with return value 0
Press any key to continue . . .
```

### • TO SWAP TWO

### NUMBERS

### ALGORITHM:



Algorithm -

- Step 1 - Input a, b, temp
- Step 2 - a = b
- Step 3 - b = temp
- Step 4 - Print a, b

### PROGRAM:

```
//Swap Two
```

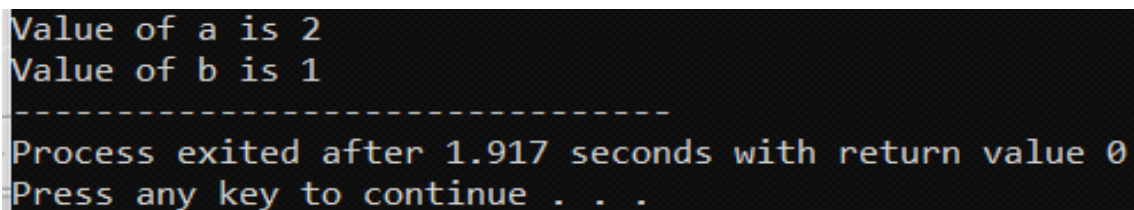
```
Numbers
```

```
#include
```

```
<iostream >
using
namespace
std; int main()
{

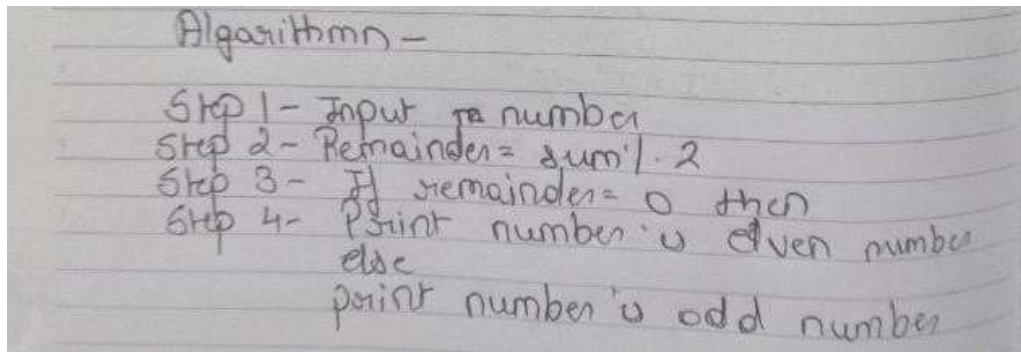
    int a = 1, b =
    2, temp;
    temp = a;
    a = b;
    b = temp;
    cout << "Value of a is
    " <<a<<endl; cout <<
    "Value of b is " <<b;
    return 0;
}
```

## OUTPUT SCREENSHOT:



```
Value of a is 2
Value of b is 1
-----
Process exited after 1.917 seconds with return value 0
Press any key to continue . . .
```

- **TO CHECK WHETHER NUMBER IS EVEN OR ODD ALGORITHM:**



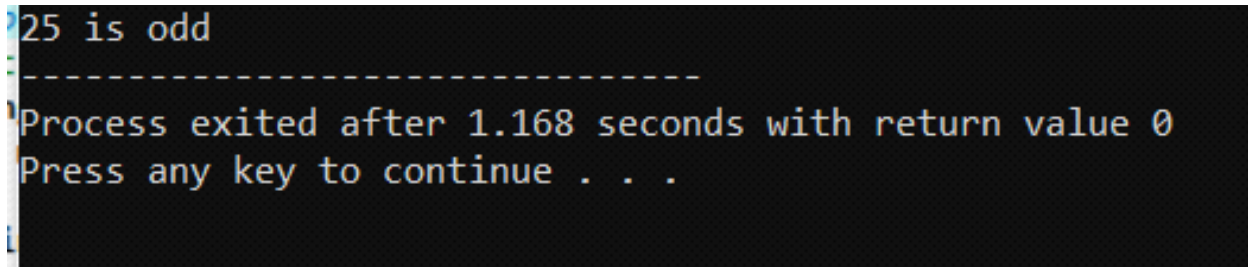
**PROGRAM:**

```
//to check whether no
is even or odd #include
<iostream>
using
namespace
std; int
main()
{

    int num =
    25; if(num
    % 2 == 0)
```

```
cout<<num<<  
" is even";  
else  
cout<<num<<  
" is odd";  
return 0;  
}
```

#### OUTPUT SCREENSHOT:



```
25 is odd  
-----  
Process exited after 1.168 seconds with return value 0  
Press any key to continue . . .
```