

Lab Number:	1
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Roll No :	19

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

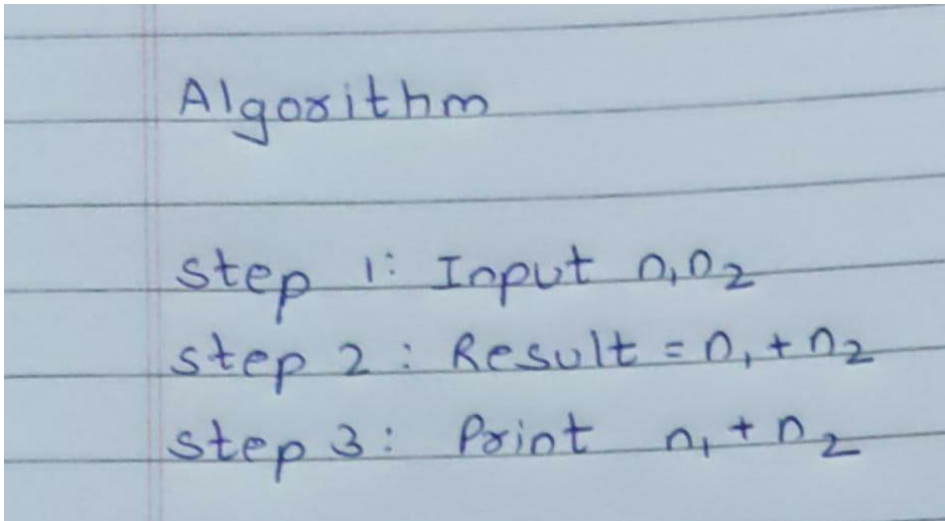
Application of object orientation

Brief introduction to C++ and Java

C++ PROGRAMS

1. TO ADD TWO NUMBERS

ALGORITHM:



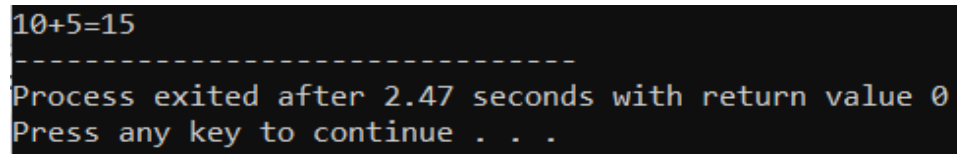
PROGRAM:

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

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

```
}
```

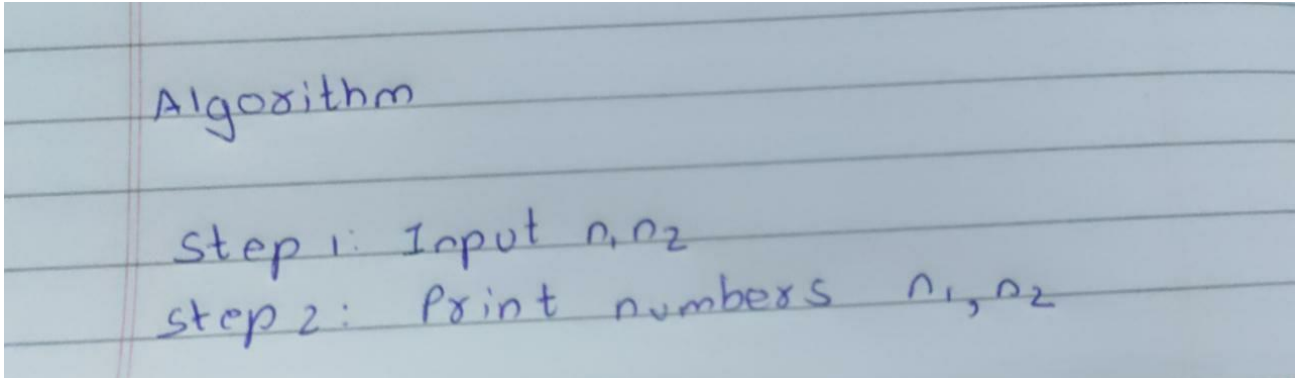
OUTPUT SCREENSHOT:



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

2. 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

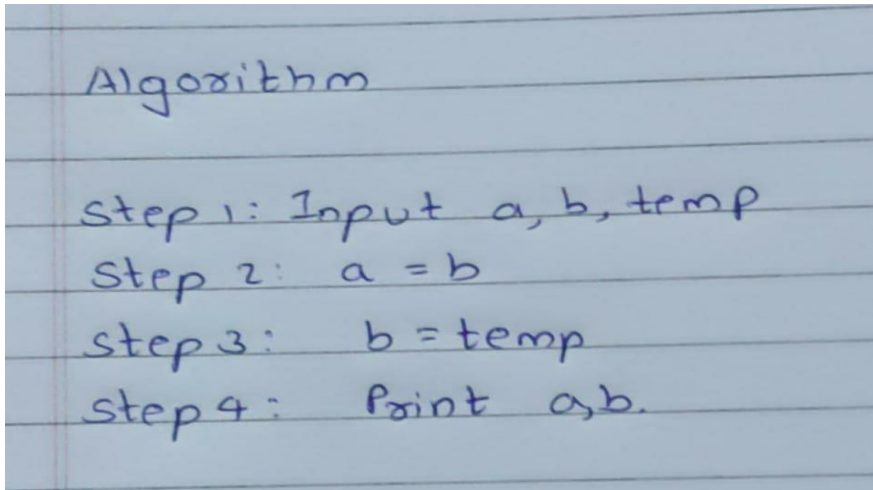
user entered numbers are:21 and 31

Process exited after 13.75 seconds with return value 0

Press any key to continue . . .

3. TO SWAP TWO NUMBERS

ALGORITHM:



PROGRAM:

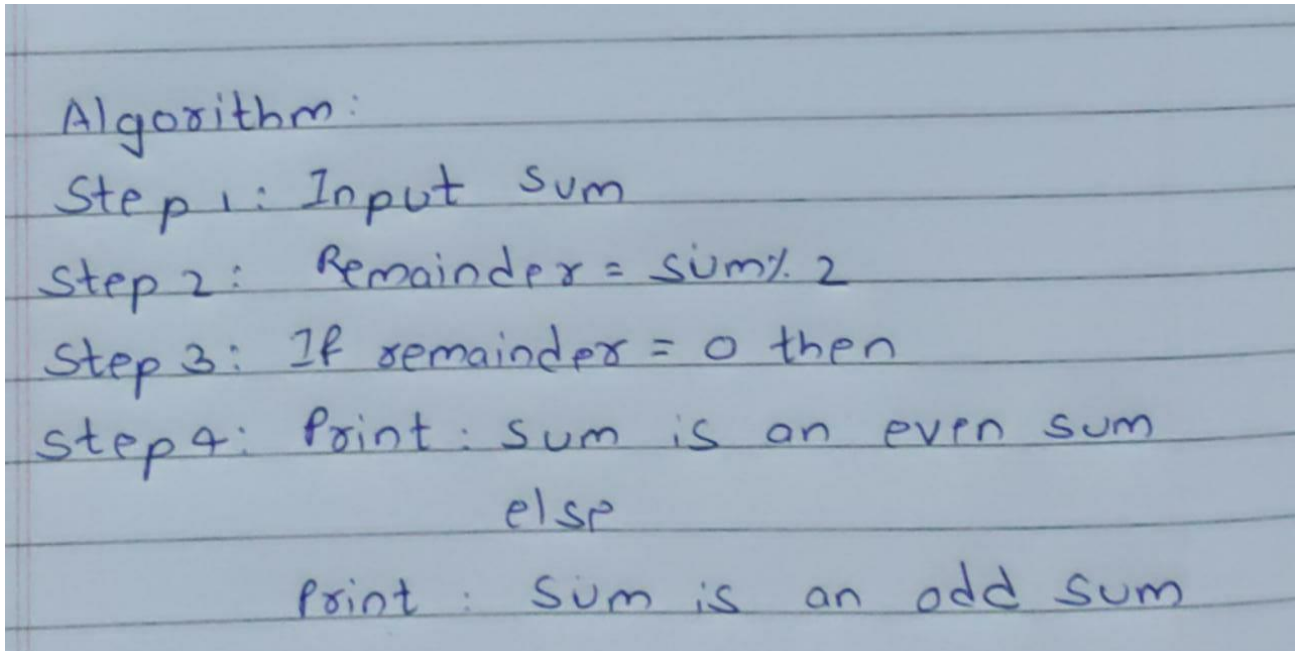
```
//Swap Two Numbers
#include <iostream >
using namespace std;
int main()
{
    int a = 1, b = 2, temp;
    temp = a;
    a = b;
    b = temp;
    cout << "Value of a is " <<a<<endl;
    cout << "Value of b is " <<b;
    return 0;
}
```

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 . . .
```

4. TO CHECK WHETHER NUMBER IS EVEN OR ODD

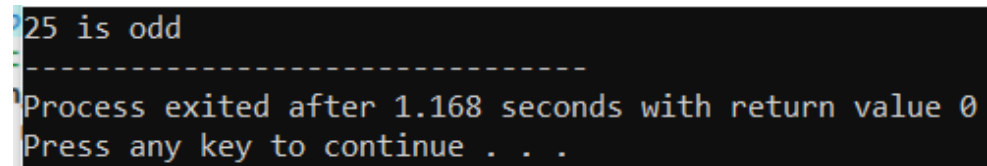
ALGORITHM:



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:

A terminal window with a black background and light blue text. The output shows '25 is odd' followed by a dashed line separator. Below the separator, it says 'Process exited after 1.168 seconds with return value 0' and 'Press any key to continue . . .'.

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