Lab Number:	1
Student Name:	Shalen Mohod
Roll No :	37

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

Theory:

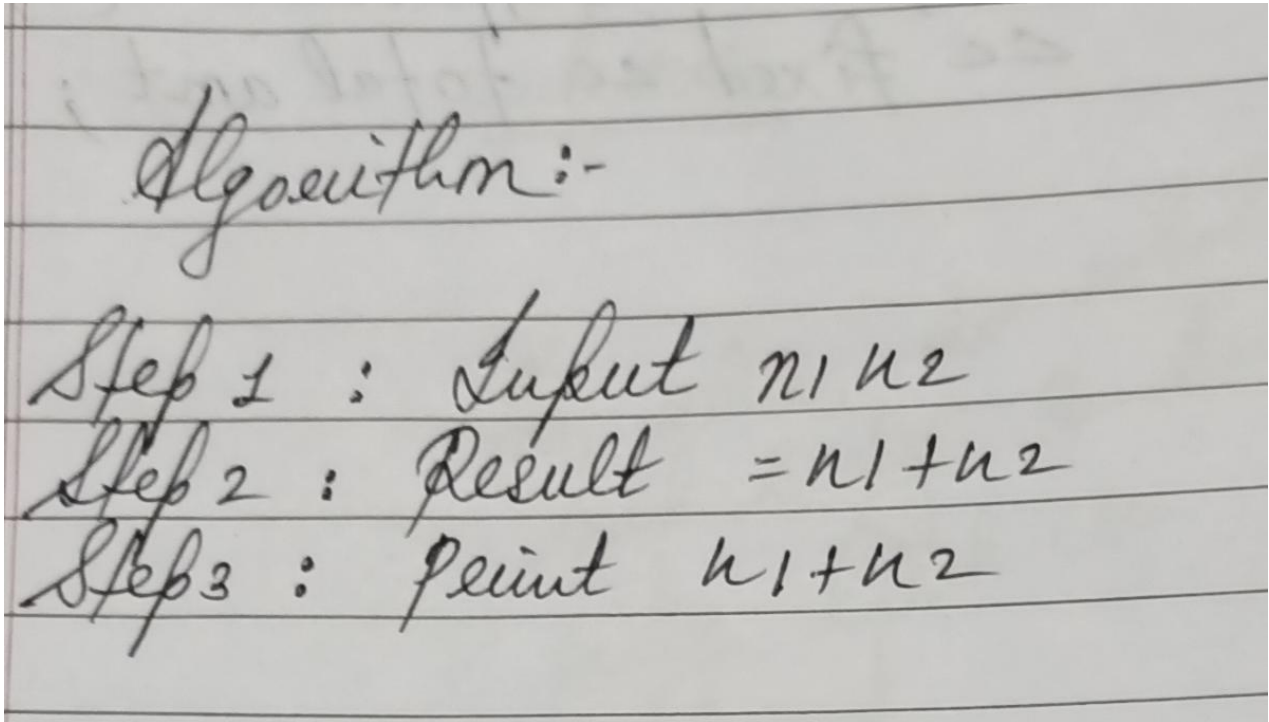**Difference between procedural and object oriented language**

Application of object orientation

Brief introduction to C++ and Java

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C++ PROGRAMS

1. TO ADD TWO NUMBERS

ALGORITHM:

Algorithm:-

Step 1 : Input n1 n2

Step 2 : Result = n1 + n2

Step 3 : Print n1 + n2

PROGRAM:

```cpp
//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;
```
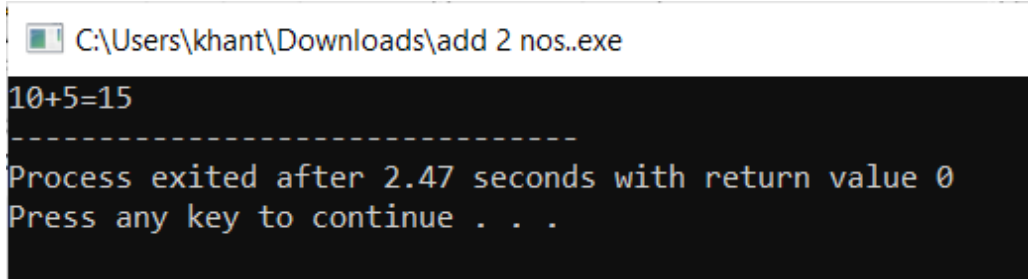
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}

OUTPUT SCREENSHOT:

C:\Users\khant\Downloads\add 2 nos..exe

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

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2. TO PRINT NUMBERS ENTERED BY USER

   ALGORITHM:

Algorithm

Step 1 : Input n1 n2

Step 2 : Print numbers n1, n2
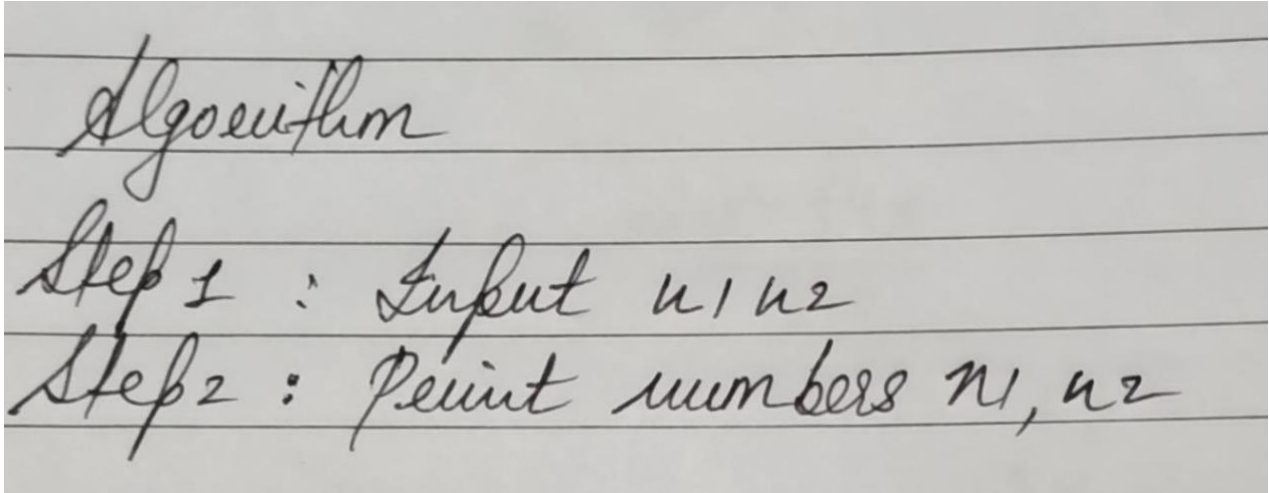
   PROGRAM:

```cpp
// 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;
}
```
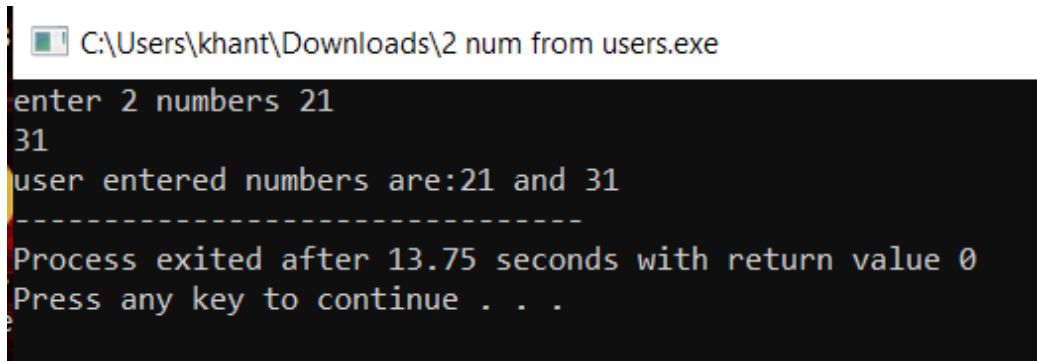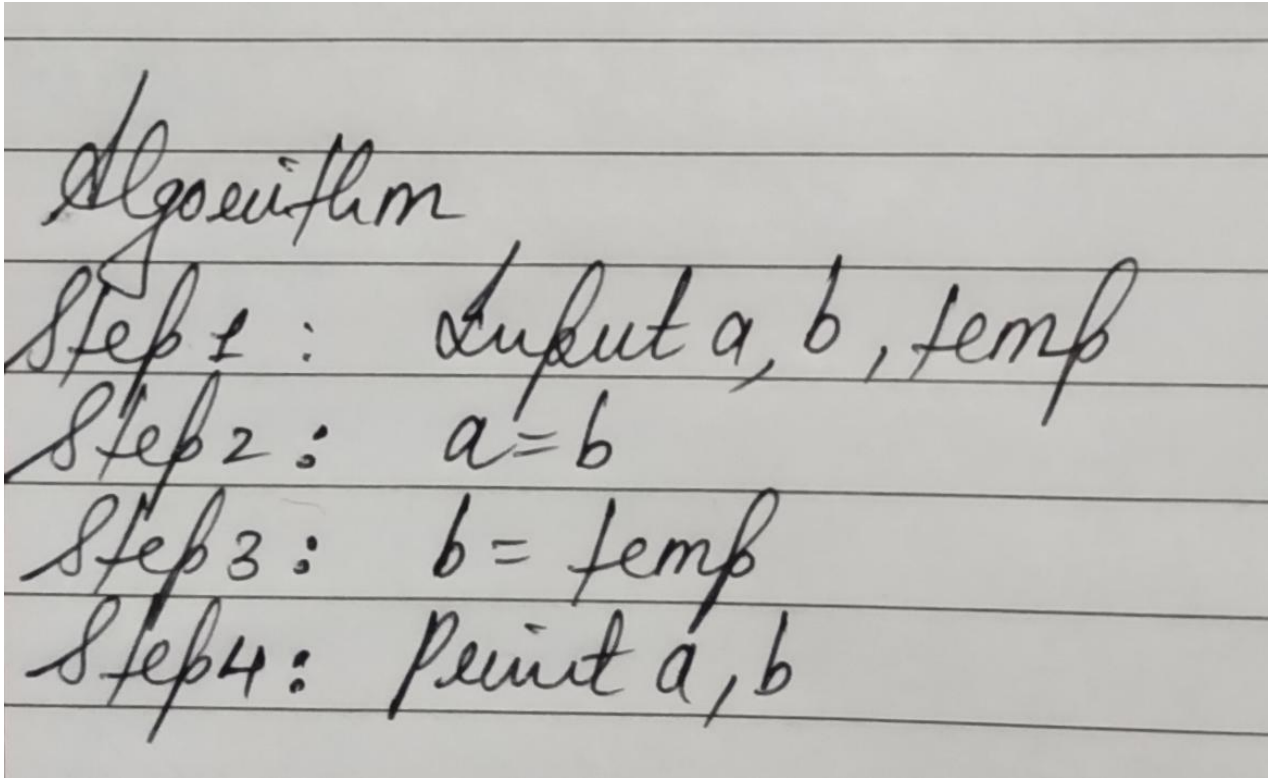
OUTPUT SCREENSHOT:

C:\Users\khant\Downloads\2 num from users.exe

```
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 . . .
```

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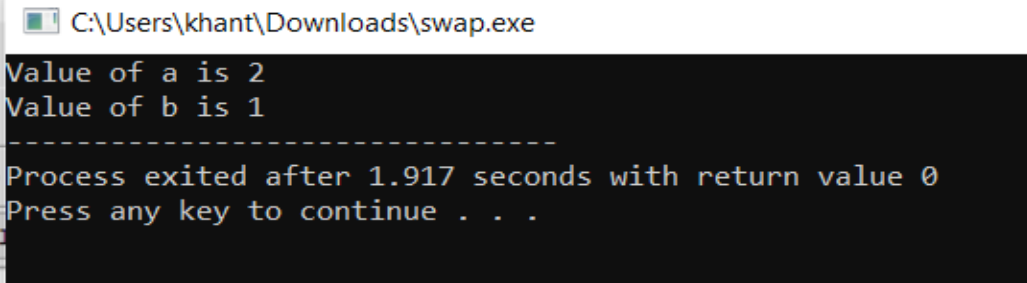**3. TO SWAP TWO NUMBERS**

ALGORITHM:

PROGRAM:

```cpp
//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;
```

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}

OUTPUT SCREENSHOT:


```
C:\Users\khant\Downloads\swap.exe
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 . . .
```

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4. TO CHECK WHETHER NUMBER IS EVEN OR ODD

ALGORITHM:

Algorithm
Step 1 :- Input num
Step 2 :- Remainder = num % 2
Step 3 : If Remainder = 0 then
Step 4: Print : num is an even num.
        Else
        Print : num is an odd num.

PROGRAM:

```cpp
//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;
}
```

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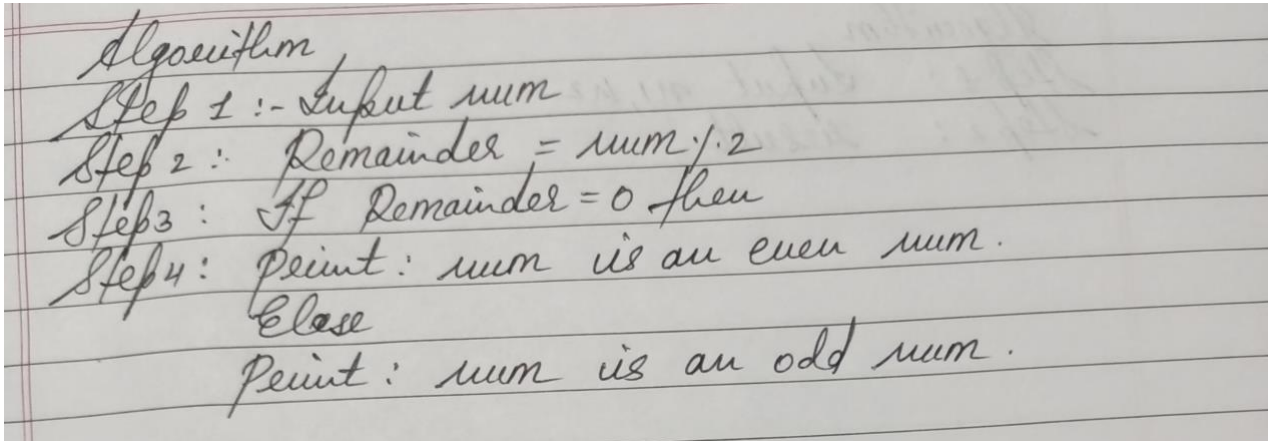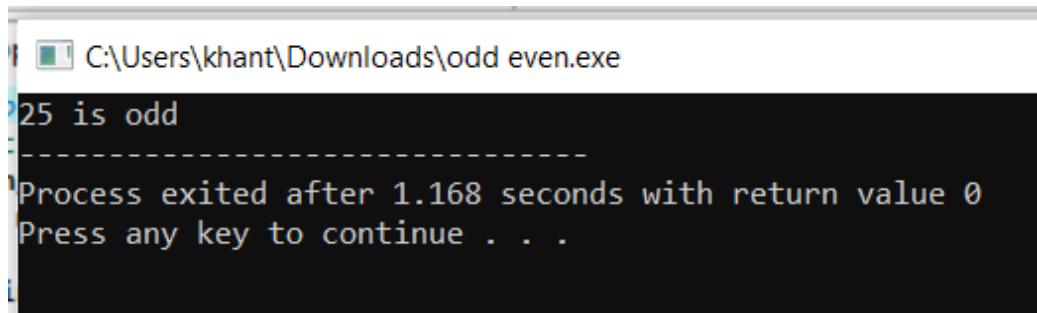**ECL304 - Skill Lab: C++ and Java Programming**
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OUTPUT SCREENSHOT:

```
C:\Users\khant\Downloads\odd even.exe

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

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