

**Don Bosco Institute of Technology, Kurla(W)**  
**Department of Electronics and Tele-Communication Engineering**  
**ECL304 - Skill Lab: C++ and Java Programming**  
**Sem III**  
**2021-22**

<b>Lab Number:</b>	<b>1</b>
<b>Student Name:</b>	<b>Pooja Jagdish Verma</b>
<b>Roll No :</b>	<b>21</b>

**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 G+ and Java program with and without any inputs to the program.
- Understanding the constructs in C++ and Java.

**Course Outcome:**

<b>ECL304.1</b>	Understand object-oriented programming concepts and implement using C++ and Java
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**Theory:**

**Difference between procedural and object oriented language**

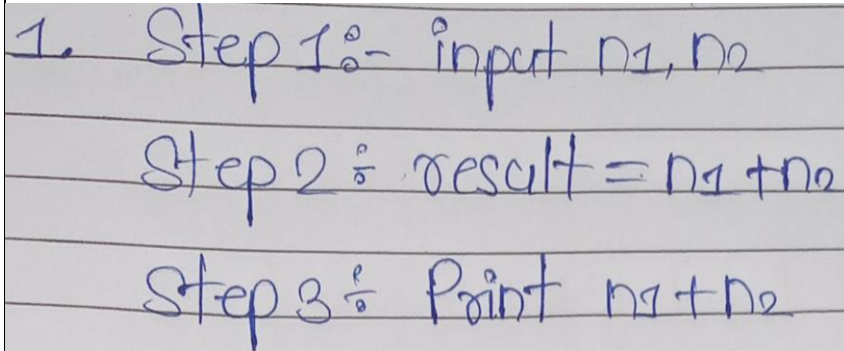
**Application of object orientation**

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

## **C ++ PROGRAMMING**

### **1.TO ADD TWO NUMBERS :**

**Algorithm :**

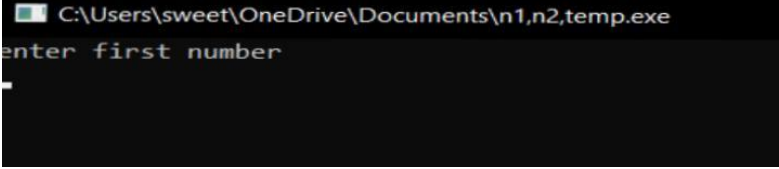
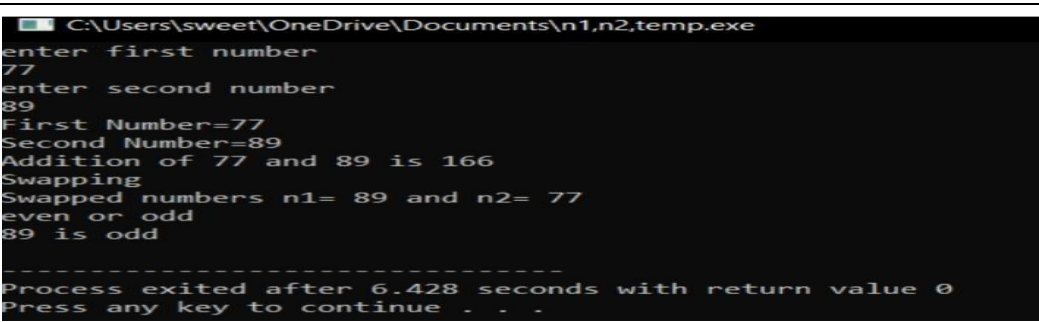


1. Step 1:- input  $n_1, n_2$   
Step 2:-  $result = n_1 + n_2$   
Step 3:- Print  $n_1 + n_2$

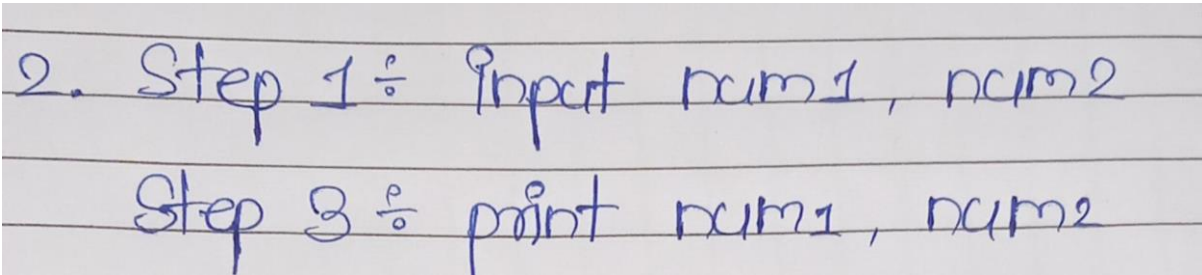
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<b>Program:</b>	<pre>//To Add Two Numbers  #include&lt;iostream&gt;  using namespace std;  int main() {     int n1,n2,temp;      cout &lt;&lt; "enter first number" &lt;&lt; endl;      cin &gt;&gt; n1;      cout &lt;&lt; "enter second number" &lt;&lt; endl;      cin &gt;&gt; n2;      cout &lt;&lt; "First Number=" &lt;&lt; n1 &lt;&lt; endl &lt;&lt; "Second Number=" &lt;&lt; n2 &lt;&lt; endl;      cout &lt;&lt; "Addition of " &lt;&lt; n1 &lt;&lt; " and " &lt;&lt; n2 &lt;&lt; " is " &lt;&lt; n1+n2;      cout &lt;&lt; "\nSwapping \n";      temp=n1;      n1=n2;      n2=temp;      cout &lt;&lt; "Swapped numbers n1= " &lt;&lt; n1 &lt;&lt; " and n2= " &lt;&lt; n2 &lt;&lt; endl;      cout &lt;&lt; "even or odd \n";      if(n1%2==0)          cout &lt;&lt; n1 &lt;&lt; " is even \n";      else          cout &lt;&lt; n1 &lt;&lt; " is odd \n";      return 0;  }</pre>
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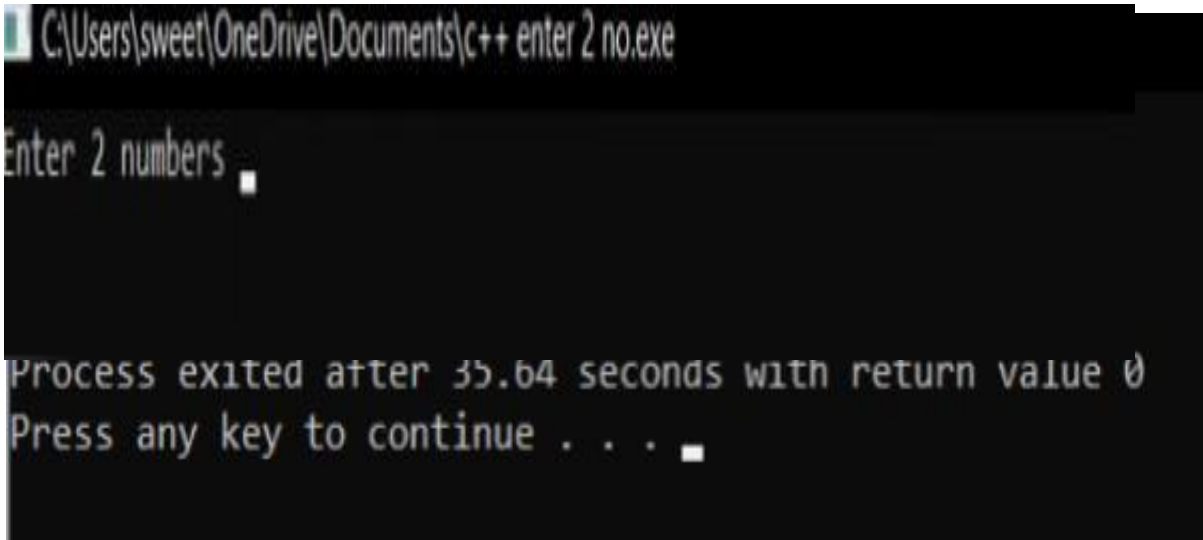
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<b>Input given</b>	
<b>Output Screenshot:</b>	

**2. TO PRINT NUMBERS ENTERED BY USER**

<b>Algorithm</b>	
<b>Program :</b>	<pre>//TO PRINT NUMBERS ENTERED BY USER  // Print Number  Entered by User #include&lt;iostream&gt; using namespace std; int main() { int num1,num2;     cout&lt;&lt;"\n Enter 2     numbers";     cin&gt;&gt;num1&gt;&gt;num2;     cout&lt;&lt; " Entered numbers are:" &lt;&lt; num1&lt;&lt; " "</pre>


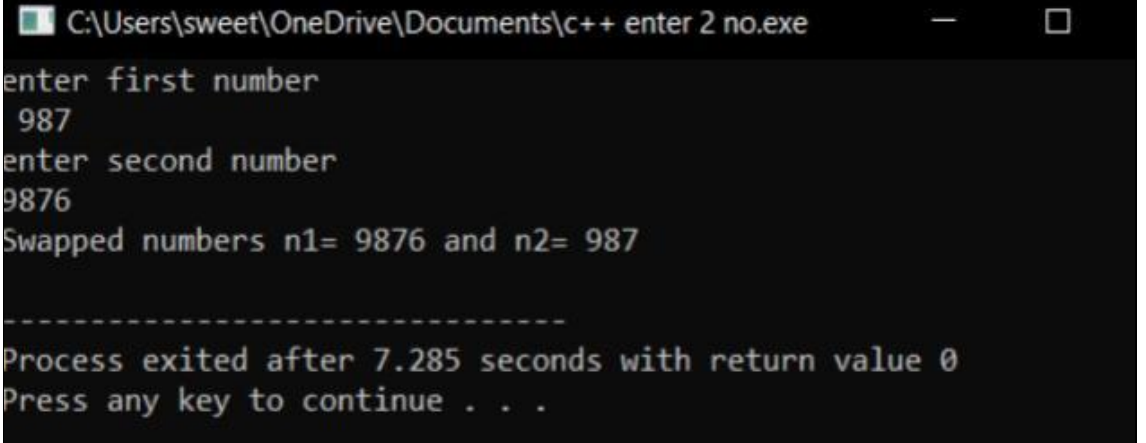
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	<pre>&lt;&lt; num2; return 0; }</pre>
Input Given :	
Output Screenshot:	

### 3. TO SWAP TWO NUMBERS

Algorithm :	<pre>3. Step 1 ÷ input a, b, c    Step 2 ÷ a = b    Step 3 ÷ b = c    Step 4 ÷ c = a    Step 5 ÷ print a, b</pre>
Program :	<pre>#include&lt;iostream&gt; using namespace std; int main()</pre>

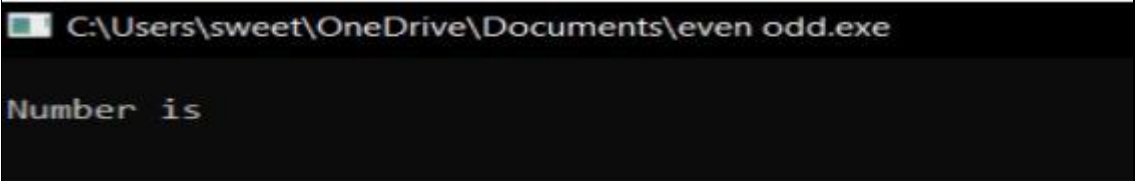
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	<pre>{ int n1,n2,temp; cout &lt;&lt; "enter first number" &lt;&lt; endl; cin &gt;&gt; n1; cout &lt;&lt; "enter second number" &lt;&lt; endl; cin &gt;&gt; n2; cout&lt;&lt;"Swapped numbers n1= "&lt;&lt;n2&lt;&lt;" and n2= "&lt;&lt;n1&lt;&lt;endl; return 0; }</pre>
Input given:	
Output Screenshot:	

**4. TO CHECK WHETHER NUMBER IS EVEN OR ODD**

Algorithm :	<p>4. Step 1 ÷ input num  Step 2 ÷ rem = num % 2  Step 3 ÷ if rem == 0, print even  Step 4 ÷ else print odd.</p>
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Program :	<pre>// To check whether the number is even or odd #include&lt;iostream&gt; using namespace std;  int main() { int num=5; cout&lt;&lt;"\n Number is"; cin&gt;&gt;num;  if ( num % 2 == 0) cout&lt;&lt;num&lt;&lt;" is even"; else cout&lt;&lt;num&lt;&lt;" is odd";  }</pre>
Input given:	
Output Screenshot:	