

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

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| Lab Number: | 1.1 |
| Student Name: | Aniket pawar |
| Roll No : | 04 |

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:

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| 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

Ans. In procedural programming, program is divided into small parts called functions. In object oriented programming, program is divided into small parts called objects. ... Adding new data and function is easy. Procedural programming does not have any proper way for hiding data so it is less secure.

Application of object orientation

OOP can also be used in manufacturing and design applications, as it allows people to reduce the effort involved. For instance, it can be used while designing blueprints and flowcharts. OOP makes it possible for the designers and engineers to produce these flowcharts and blueprints accurately.

Faculty: Ms. Deepali Kayande

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Brief introduction to C++ and Java

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| Algorithm : | <p>STEP 1: START</p> <p>STEP 2: TAKE INPUT N1 AND N2 FROM USER</p> <p>STEP 3: ADDITION = N1+N2</p> <p>STEP 4: DECLARE TEMPORARY VARIABLE WITH NAME 'TEMP'</p> <p>STEP 5: TEMP=N1, N1=N2, N2=TEMP</p> <p>STEP 6: CHECK N1 DIVISIBLE BY 2, IF YES NUMBER IS EVEN ELSE ODD</p> <p>STEP 7: PRINT ADDITION OF N1 AND N2</p> <p>STEP 8: PRINT SWAPPED NUMBERS</p> <p>STEP 9: STOP</p> |
| Program: | <pre>public class Lab1 { public static void main(String[] args) { Scanner sc = new Scanner(System.in); // Create a Scanner object /* System.out.println("Enter username");</pre> |

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| | <pre>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(); System.out.println("Number 1 = "+n1+" Number 2 = "+n2); System.out.println("\n ADDITION\n");</pre> |
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| | <pre>System.out.println("\nAddition of both numbers is: " +(n1+n2)); System.out.println("\n SWAPPING\n"); temp=n1; n1=n2; n2=temp; System.out.println("After swapping Number 1 = "+n1+" Number 2 = "+n2); System.out.println("\n EVEN/ODD\n"); if(n1%2==0) System.out.println(n1+" is Even"); else</pre> |
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| | <pre>System.out.println(n1+" is Odd"); } }</pre> |
| Input given: | n1=7 n2=8 |
| Output Screenshot: | |

```
enter first number
7
enter second number
8
First Number=7
Second Number=8
Addition of 7 and 8 is 15
Swapping
Swapped numbers n1= 8 and n2= 7
even or odd
8 is even
|
```