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

Lab Number:	1
Student Name:	Kanishka Aware
Roll No :	13

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

A procedural programming language consists of a set of procedure calls and a set of

code for each procedure. On the other hand, object oriented languages are based on

entities known as objects.

Procedural language: Simple, easy implementation of compilers and interpreters

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Object oriented language: Improved software development productivity due to modularity,

extensibility and reusability.

Application of object orientation

Main application areas of OOP are: User interface

design such as windows, menu. Real Time Systems. Simulation and Modelling. Object

oriented databases. AI and Expert System. Neural Networks and parallel programming.

Decision support and office automation systems

Brief introduction to C++

C++ is a cross-platform language that can be used to create high-

performance applications. It was developed by Bjarne Stroustrup, as an extension to the C

language. It gives programmers a high level of control over system resources and memory. It is an

object-oriented programming language which gives a clear structure to programs and allows code

to be reused, lowering development costs. Also, it is portable and can be used to develop

applications that can be adapted to multiple platforms.

Algorithm:	STEP 1: start
	STEP 2: define two n1 and n2
	STEP 3: input number1,n1
	input number2, n2
	STEP 4: addition of two numbers n1 and n2
	STEP 5: swapping of two numbers n1 and n2
	STEP 6: odd or even
	STEP7: stop

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Program:	https://github.com/kanishkadbit/skill-labs-wit h-OOPM/commit/eec77fcca0f930e09622417 87de6ef9b03afca60
Input given:	15 16
Output Screenshot:	enter first number 15 enter second number 16 First Number=15 Second Number=16 Addition of 15 and 16 is 31 Swapping Swapped numbers n1= 16 and n2= 15 even or odd 16 is even [Program finished]

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