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:	**03**
Student Name:	**Raveena Pitale**
Roll No :	**27**

Title:

3.1 Write a C++ program to Create a class Student with two method getData() and printData(). getData() to get the value from the user and display the data in printData(). Create the two objects s1 ,s2 to declare and access the values from class StudentTest.

3.2 Write a C++ program for Basic bank Management System

Learning Objective:

- Students will be able to write C++ program for using classes and objects.

Learning Outcome:

- Ability to execute a simple C++and program by accepting and displaying values using functions
- Understanding the classes and objects concept in C++

Course Outcome:

ECL304.1	Understand object-oriented programming concepts and implement using C++ and

Theory:

Difference between procedural and object oriented language

Procedural programming uses a list of instructions to tell the computer what to do step-by-step. Procedural programming relies on - you guessed it - procedures, also known as routines or subroutines. A procedure contains a series of computational steps to be carried out. Procedural programming is also referred to as imperative programming. Procedural programming languages are also known as top-down languages.

Object-oriented programming, or OOP, is an approach to problem-solving where all computations are carried out using objects. An object is a component of a program that knows how to perform certain actions and how to interact with other elements of the program. Objects are the basic units of object-oriented programming

Application of object orientation

• User interface design such as windows, menu.

• Real Time Systems

• Simulation and Modeling

• Object oriented databases

• AI and Expert System

• Neural Networks and parallel programming

• Decision support and office automation systems etc

Brief introduction to C++:

C++ (pronounced "see plus plus") is a programming language began as an expanded version of C. The C++ were first invented by Bjarne Stroustrup in 1979 at Bell Laboratories in Murray Hill, New Jersey. Bjarne Stroustrup initially called the new language "C with Classes." However, in 1983 the name was changed to C++. C++ is a middle-level programming language. C++ is a statically typed, compiled, general purpose, case -sensitive, free-form programming language that supports procedural, object-oriented, and generic programming

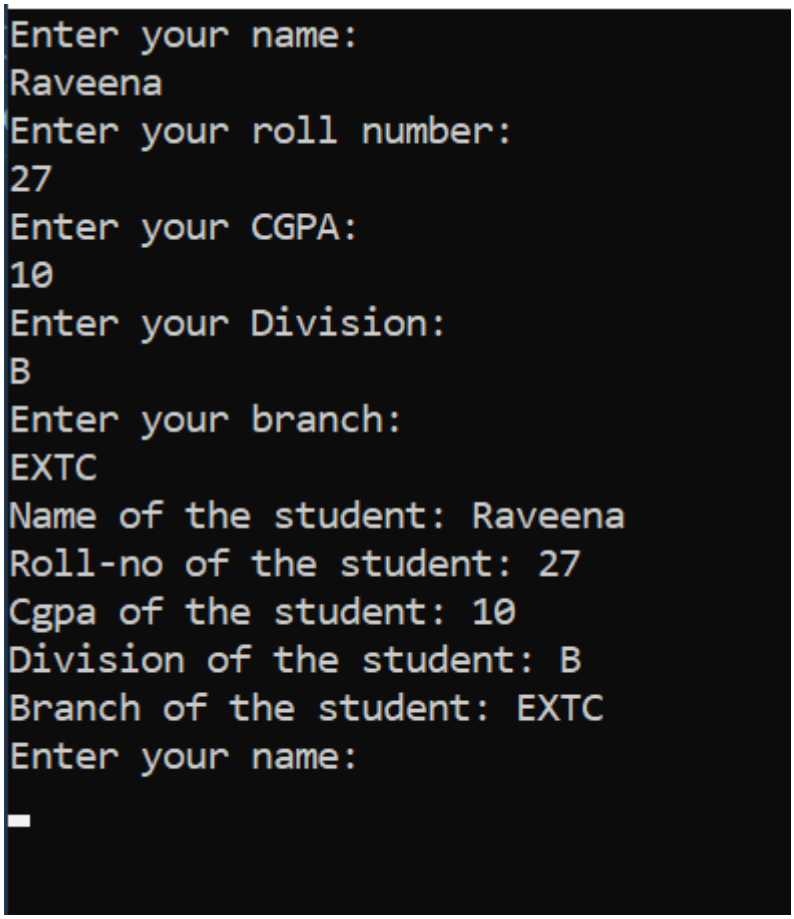
ALGORITHM 1:

1. Start
2. Define Class Student
3. Define attributes – Name , Roll_no, cgpa, div , branch
4. Define and declare method – getdata() to get input from user.
5. Define and declare method – printdata() to print the values
6. Define Main function()
7. Create object s1, s2 to call the class functionality.
8. End

PROGRAM:

Skill-Lab-with-OOPM/27_Lab03.1.cpp at main · rpitale/Skill-Lab-with-OOPM (github.com)

OUTPUT:



ALGORITHM 2:

1. Start

2. Define Class BankLab 2

3. Define attributes – Name , account_type , account_number, amount, balance

4. Declare attributes by using constructor of class.

5. Define and declare method – deposit() to deposit the amount

6. Define and declare method – withdraw() to withdraw the amount

7. Define and declare method – display() to display the account details

8. Define Main function()

9. Create object b1, b2, b3 to call the class functionality.

10. Do – while loop to repeat the process

PROGRAM:

Skill-Lab-with-OOPM/27_Lab03.2.cpp at main · rpitale/Skill-Lab-with-OOPM (github.com)

OUTPUT:

```
Menu
1.Deposit
2.Withdraw
3.Display
Enter option
1
Please enter your account number:
2
Enter the amount to deposit: 1000
Do you want to continue?[Y/N]y
Menu
1.Deposit
2.Withdraw
3.Display
Enter option
2
Please enter your account number:
500
Enter value between 1 to 3Do you want to continue?[Y/N]y
Menu
1.Deposit
2.Withdraw
3.Display
Enter option
3
Please enter your account number:
2
Name :makarandAccount Number:2Account Type:sBalance: 3000Do you want to continue?[Y/N]
```