

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:	3
Student Name:	Pratham Amare
Roll No :	23

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++ and java program for using classes and objects.

Learning Outcome:

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

Course Outcome:

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

Explain about Constructor.

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

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how to perform certain actions and how to interact with other elements of the program.

Objects are the basic units of object-oriented programming

Explain about classes and objects in Java

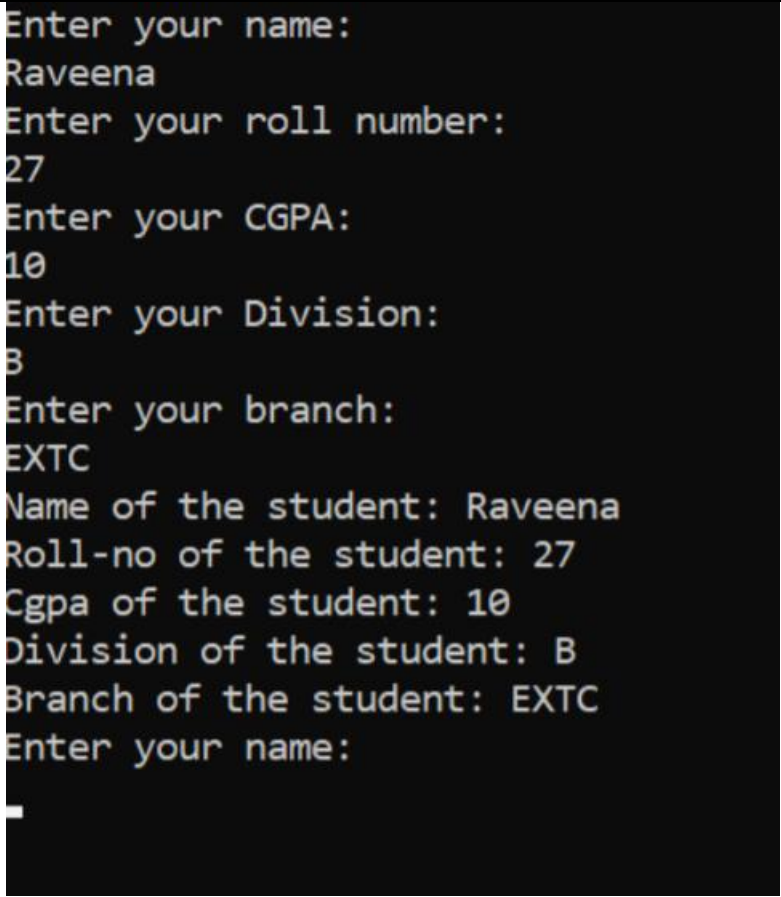
C++ (pronounced "see plus plus") is a programming language began as an expanded version of C. The C++ were first invented by Bjarne Stroustrup in 1979 at Bell Laboratories in Murray Hill, New Jersey. Bjarne Stroustrup initially called the new language "C with Classes." However, in 1983 the name was changed 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 :	<ol style="list-style-type: none">1. Start2. Define Class Student3. Define attributes – Name , Roll_no, cgpa, div , branch4. Define and declare method – getdata() to get input from user.5. Define and declare method – printdata() to print the values6. Define Main function()7. Create object s1, s2 to call the class functionality.8.End
Program:	<pre>#include<iostream> using namespace std; class Student { public: string name; int roll_no; float cgpa; char div; string branch; void getdata() {</pre>

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```
cout<<"Enter your name:"<<endl;
cin>>name;
cout<<"Enter your roll number:"<<endl;
cin>>roll_no;
cout<<"Enter your CGPA:"<<endl;
cin>>cgpa;
cout<<"Enter your Division:"<<endl;
cin>>div;
cout<<"Enter your branch:"<<endl;
cin>>branch;
}
void getdata(string n,int r,float c,char d,string b)
{
name=n;
roll_no=r;
cgpa=c;
div=d;
branch=b;
}
void printdata()
{
cout<<"Name of the student: "<<name<<endl;
cout<<"Roll-no of the student: "<<roll_no<<endl;
cout<<"Cgpa of the student: "<<cgpa<<endl;
cout<<"Division of the student: "<<div<<endl;
cout<<"Branch of the student: "<<branch<<endl;
}
};
```

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	<pre>int main () { Student s1; Student s2; s1.getdata(); s1.printdata(); s2.getdata(); s2.printdata(); return 0; }</pre>
Input given:	
Output Screenshot:	 <p>The screenshot shows the output of a C++ program. It prompts the user to enter their name, roll number, CGPA, division, and branch. The user enters 'Raveena', '27', '10', 'B', and 'EXTC' respectively. The program then displays the entered data for both student objects (s1 and s2), showing 'Name of the student: Raveena', 'Roll-no of the student: 27', 'Cgpa of the student: 10', 'Division of the student: B', and 'Branch of the student: EXTC'. The prompt 'Enter your name:' is shown again at the end.</p>