Lab Number:	3
Student Name:	Aniket pawar
Roll No :	04

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

Theory:

Difference between procedural and object oriented language

Application of object orientation

OOP can also be used in manufacturing and designing applications as it allows people to reduce the efforts involved. For instance, it can be used while designing blueprints and flowcharts. So it makes it possible to produce these flowcharts and blueprint accurately

Brief introduction to C++ and Java

Algorithm:	1) start
	2) take input name, roll no, branch,

	division, CGPA. from user	
	3) create method void printdata()	
	4) create an object	
	5) print data	
Program:	// Online C++ compiler to run C	
	#include <iostream></iostream>	
	using namespace std;	
	class Student {	
	public:	
	string name;	
	int roll_no;	
	float cgpa;	
	char div;	
	string branch;	
	void getdata()	
	{	
	cout<<"Enter your name:"< <endl;< th=""></endl;<>	
	cin>>name;	
	cout<<"Enter your roll number:"< <endl;< th=""></endl;<>	
	cin>>roll_no;	
	cout<<"Enter your CGPA:"< <endl;< th=""></endl;<>	
	cin>>cgpa;	
	cout<<"Enter your Division:"< <endl;< th=""></endl;<>	
	cin>>div;	
	cout<<"Enter your branch:"< <endl;< th=""></endl;<>	

```
cin>>branch;
       }
       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: "<<br/>branch<<endl;
       }
};
  int main ()
       {
  Student s1;
  Student s2;
       s1.getdata();
       s1.printdata();
       s2.getdata();
       s2.printdata();
```

	return 0;	
	}	
Input given:	Roll no. 04, name -aniket, Branch-EXTC,	
	Cgpa-8, division-b	
Output Screenshot:		
	Compile Result	
	Enter your name: aniket Enter your roll number: 04 Enter your CGPA: 8 Enter your Division:	
	b Enter your branch: EXTC Name of the student: aniket Roll-no of the student: 4 Cgpa of the student: 8 Division of the student: b Branch of the student: EXTC Enter your name:	

^{3.2} Write a C++ program for Basic bank Management System

Program-#include<iostream> Using namespace std; Class BankLab2 { Public: String name; Char account_type; Int account_number,amount; Float balance; BankLab2(string n,int a, char t, float b) { Name = n; Account_number=a; Account_type=t; Balance=b; } Int deposit() { Cout<<"Enter the amount to deposit: ";

Cin>>amount;

{

If(amount<0)

```
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          Cout<<"Invalid amount, Enter a valid amount";
           Return 0;
     }
     Balance=balance+amount;
     Return 1;
}
Int withdraw()
{
     Cout<<"Your Balance= "<<balance:
     Cout<<"Enter amount to withdraw: ";
     Cin>>amount;
     If (balance<amount)
     {
          Cout<<"Insufficient Balance: ";
          Return 0;
     }
     If(amount<0)
     {
          Cout<<"Invalid amount";
          Return 0;
     }
```

```
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          Balance=balance-amount;
          Return 1;
}
     Void display()
     Cout<<"Name:"<<name<<endl;
     Cout<<"Account Number:"<<account_number<<endl;
  Cout<<"Account Type:"<<account_type<<endl;
  Cout << "Balance: " << balance;
};
  Int main()
  {
     Int account_number;
      Char ans;
     BankLab2 b1("salman",1,'s',2000);
     BankLab2 b2("makarand",2,'s',2000);
     BankLab2 b3("siddharth",3,'s',2000);
     Cout<<"Menu"<<endl:
     Cout<<"1.Deposit"<<endl;
     Cout<<"2.Withdraw"<<endl;
     Cout<<"3.Display"<<endl;
     Cout<<"Enter option"<<endl;
```

```
Int op;
     Cin>>op;
          Do
               Cout<<"Please enter your account
number:"<<endl;
               Cin>>account_number;
                    Switch(account_number)
                    {
                         Case 1: if(op==1)
                                        B1.deposit();
                                   If(op==2)
                                        B1.withdraw();
                                   If(op==3)
                                        B1.display();
                                   Break;
                                  if(op==1)
                         Case 2:
                                        B2.deposit();
                                   If(op==2)
                                        B2.withdraw();
                                   If(op==3)
                                        B2.display();
```

```
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                                      Break;
                            Case 3:
                                      if(op==1)
                                            B3.deposit();
                                      If(op==2)
                                            B3.withdraw();
                                       If(op==3)
                                            B3.display(
                                      Break;
                            Default: cout<<"Enter value between 1
to 3";
                                      Break;
                      }
           Cout<<"Do you want to continue?[Y/N]";
                      Cin>>ans;
                      If(ans=='Y' || ans == 'y')
                      Cout<<"Menu":
                   Cout<<"1.Deposit";
                   Cout<<"2.Withdraw";
                Cout<<"3.Display";
                      Cout<<"Enter option";
```

```
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Cin>>op;
}
While(ans!='N');
}
```

Output-

```
Compile Result
Menu
1.Deposit
2.Withdraw
3.Display
Enter option
Please enter your account number:
Your Balance= 2000Enter amount to without
raw: 500
Do you want to continue?[Y/N]y
Menu1.Deposit2.Withdraw3.DisplayEnter
ption3
Please enter your account number:
2
Name : makarand
Account Number:2
Account Type:s
Balance: 1500Do you want to continue?[\
/N]
```