

Department of Computer Science & Engineering

1. Write C++ program to design a class called Bank Account. Include following data members like name of the depositor, account number and balance. Use following member functions a) to initialize values b) deposit an amount c) to withdraw an amount d) to display name and balance.
2. Write a C++ program to create a class called COMPLEX and implement the following overloading function ADD that return a COMPLEX number.
 - i. ADD(a,c2);- where a is an integer(real part) & c2 is a complex no.
 - ii. ADD(c1,c2);- where c1 & c2 are complex nos.Use Function overloading(ADD) and Friend function concept for the implementation
3. Write a C++ program with class Time with data members that represents hours and minutes. Include appropriate member functions to compute time in hours and minutes. (Use of objects as arguments).
4. Given that an EMPLOYEE class contains following members. Data members: Eno, Ename and salary Member functions: to read the data, to print data members. Write a C++ program to read the data of N employees and display details of each employee.(use Array of objects concept).
5. Write a C++ program to demonstrate to uses of constructors in derived class concept. (Any inheritance you can use but constructors in base class should have at least one parameter.

PART B

6. Write a C++ program to create a class sample with integer, character and float data members. Demonstrate Constructor Overloading on this class with all types of constructors including default argument constructor.
7. write a C++ program to demonstrate the working of dynamic constructors using a class STRNG with string as data member inside the class, include appropriate member functions to display the object data and a member function to concatenate two strings.
8. Write a C++ program for the diagram using Hierarchical inheritance. Use your own data members and member functions to display student details.

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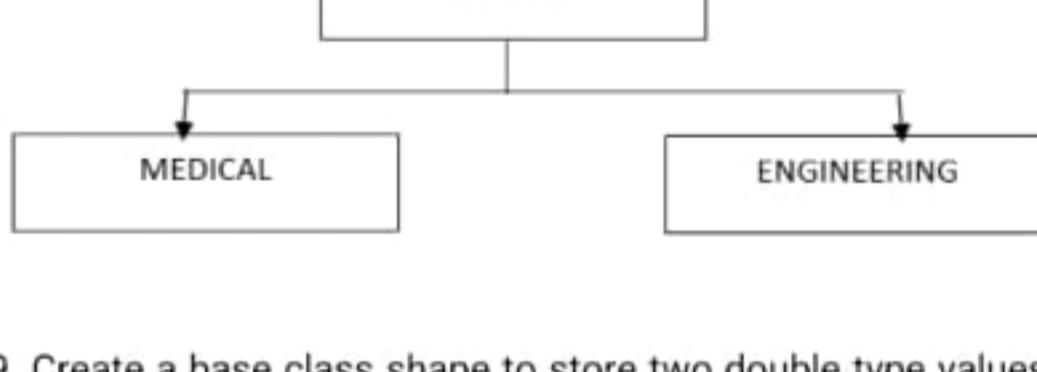


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9. Create a base class shape to store two double type values. Derive two specific classes called triangle and rectangle from the base shape. Add to the base class, a member function get_data() to initialize base class data members and another function display_area() to compute and display the area of figures. Make display_area() as a virtual function and redefine this function in the derived class to suit the requirements. (area of rectangle = $x*y$, Area of triangle = $1/2*x*y$);
10. Write a C++ program to overload binary '+' and '-' operator to add and subtract two complex numbers. Define relevant data members and member functions for reading and displaying the complex objects.