



GLS UNIVERSITY
GLS INSTITUTE OF COMPUTER APPLICATIONS
0301205 PRACTICAL ON IOOP
BCA Sem – II
Practical Assignment – IV

List of Practical Programs:

1. Write a C++ program to make function to find odd/even using class.
2. Write a C++ program to make function to find positive/negative using class.
3. Write a C++ program to make function to find minimum/maximum from 3 no using class.
4. Create one structure for student include data members Rollno, name, sub1, sub2, sub3. Take values from user for all the variables and print them.
5. Create a structure for employee entity include data members Empid, Name, Dep_name, Salary include necessary member functions and make 2 variable of employee structure.
6. Create one class for student include data members Rollno, name, sub1, sub2, sub3. Take values from user for all the variables and print them.
7. Create a class for employee entity include data members Empid, Name, Dep_name, Salary include necessary member functions and make 2 variable of employee class.
8. Create a class circle include pi and r as data members. Function area() which calculates area. Make one object and access area using object.
9. Create a MAX_MIN class that include two member function max and min. Max calculates max from 2 no and min calculates min from 2 no. (use scope resolution operator to define function outside of class).
10. Write a C++ program that calculates the value of m raised to power n for both int and double data types. (Use the concept of function overloading)
11. Create a class name bank and create 3 member function named balance, deposit and withdraw and declare all the member function outside the class using scope resolution operator.
12. Create an Array Of Class Object using class name student in which create data members like roll no, age, height, weight and gender and also create member function which accept information of above data member and display the same.
13. Create a class name Box, in that create data member as height, breadth and length, and also create member function named as volume and compare. Create two objects and compare which box volume is greater using 'this' pointer.
14. Create a class salesman which includes private data members salesman_no, Salesman_name, product_no, target, sales_made, commission and private method calculate_comm() which calculates 20% commission on sales if target is less then sales Public method for reading and printing and calc_add_mon_sale which add sales.
15. Define a class Country that store the name of the country; its population and area. Create 2 or 3 objects of this class and find the county with largest population and the country which is geographically largest.(pass object as arguments)
16. Implement a class Account. An account has account holder's acc_no as static name, a balance, functions to add and withdraw money and a function to query current balance. Charge a penalty of Rs. 100 if an attempt is made to withdraw more money than available in the account. Also provide the functionality to withdraw and deposit money in the account. Use nested function in withdraw function(use switch case)

17. Make the nested class "Display" is given as "public" member of the class "Nest" and access values of display class. (Hint use make object using :: like "Nest::Display")
18. Write a C++ program to create a student class include data members Rollno, Name, counter as static variable /data member include necessary member functions And create 2 objects of emp also use public and private access specifier. Also include static member function to access static variable counter.
19. Make one class complex which includes float member x and y and include 2 friend non member function friend complex sum(complex, complex); It calculates sum of two complex and return complex object friend void show(complex); It will display complex object.
20. Write a C++ program using a class to store price list of 50 items and to print the largest price as well as the sum of all prices. Use static member, static method and friend method if necessary.
21. Write a C++ program to add data members of two different on Objects of two Different class using friend Function.
22. Write a C++ program to create unique roll number for students using static data member.
23. Write a C++ Use friend function to find out mean of three numbers from three different classes.
24. Write a C++ Use a friend function to find average of a given number.
25. Write a C++ Write a static function setcount() that increments the counter every time the function is called.
26. Create two classes DM and DB which store the value of distances. DM stores distances in meters and centimeters and DB in feet and inches. Write a program that can read values for the class objects and add one object of DM with another object of DB. Use friend function to carry out the addition operation. The object that stores the results may be a DM object or DB object, depending on the units in which the results are required.
27. Create a class employee with name, salary, age as member, use get_data() and show() functions. Display details of 3 manager employees.
-  28. Create a class paper with width and height as data member. Create function outside a class that finds out area and perimeter of that paper .Pass object as argument.
area=weight*height , perimeter=2*width+height.
-  29. Write a C++ program to pass object as an argument. The program adds the two heights given in feet and inches.
30. Write a C++ program to perform addition of two object variable into third object and return the same.
31. Write a C++ program that illustrates the use of nested classes.