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

List of Practical Programs:

1. Write a program to accept no. of seconds and display its equivalent no. Of hours, no of minutes and no. Of seconds.
2. Write a program to accept date month and year from user and print whether date is valid or not.
3. Write a program to find the area and circumference of a circle, given its radius r.
   Area = PI*r*r, Circumference=2*Pi*r.
4. Write a program to find the area and perimeter of a rectangle using class.
5. If a and b are two numbers, find out the values of $(a+b)^2$ and a^2+b^2+2ab.
6. If a and b are two numbers, find out the values of $(a-b)^2$ and a^2+b^2-2ab.
7. Write a program to find the value of s and v, the distance travelled by an object.
   - $s=u*t+0.5*a*t^2$, where u is the initial velocity, t is the time taken and a is the acceleration.
   - $v^2=u^2-2*a*s$ where u is the initial velocity, t is the time taken and a is the acceleration.
8. Write a program to calculate net salary of an employee given his basic pay.

   Allowances
   DA 45%
   HRA 14%
   CCA 10

   Deductions
   PF 12%
   LIC 15%
   All the allowances are based on basic pay.
   Gross salary=Basic pay+Allowances
   Net Salary = Gross salary – Deductions
   (Note: use function or class)
9. Write a program to find the largest of three numbers using conditional operator.
10. Write a C++ program to reverse a number.
11. Write a C++ program to check whether a number is palindrome or not.
12. Write a C++ program to check whether a number is prime or not.
13. Write a C++ program to print Fibonacci series.
14. Write a C++ Program to print integer entered by user only if that number is positive.
15. Write a C++ Program to check whether integer entered by user is positive or negative (Considering 0 as positive).
16. Write a C++ program to add numbers entered by user until user enters 0.
17. Write a C++ program to display integer from 1 to 10 except 6 and 9.
18. Write a C++ program to built simple calculator using switch Statement.

19. Write a C++ program to demonstrate the working of goto statement.

    Program calculates the average of numbers entered by user. If user enters negative number, it ignores that number and calculates the average of number entered before it.

20. Write a C++ program to Calculate sum of 5 subjects and Find percentage.
21. Write a C++ program to Find greatest in 3 numbers.
22. Write a C++ program to reverse a string.
23. Write a C++ program to Print First 10 Natural Numbers.
24. Write a C++ program to Check for Armstrong Number.
25. Write a C++ program to Print All ASCII Value Table.
26. Write a C++ program to Read Two Integers M and N & Swap their Values.
27. Write a C++ program to Accept two Integers and Check if they are Equal.
28. Write a C++ program to find the reverse of a number using user define function.
29. Write a C++ program to find factorial of a number using recursion.
30. Write a C++ program to find the sum first 10 natural numbers using recursion.
31. Write a C++ program to generate Fibonacci series using recursion.
32. Write a C++ program to check whether a number is prime or not using user define function.
33. Make inline function for sum, difference, product, division and modulus of two numbers. **Note:** Use Switch Case.
34. Create five inline functions like show_int, show_float, show_double, show_char and show_string to display value of each data types respectively.
35. Write a C++ program to find the addition of two integer, two float, two double, two char and two string values. **Note:** Use Function overloading concept.
36. Write a C++ program to find the multiplication of two integer, three integer, four integer values. **Note:** Use Function overloading concept.
37. Write a C++ program to find the addition of two integer values and if values arenot passed then consider default values.
38. Write a C++ program to find the area of circle, triangle and rectangle. **Note:** Use Function overloading concept.
39. Write a c++ program to find the addition of two integer, three integer and four integer values and if any of the two values is not passed then use default value.