

**GLS University**  
**FCAIT – BCA – SEM – II**  
**Subject : Practical on IOOP**  
**Practice Excercise - 1**

1. Write a C++ program to enter the principal, rate & time and print the simple interest.
2. Prepare Student result using function. (Include rollno, name, 3 sub marks, total, and Grade) Make function to find total and average and grade.
3. Write a program to convert Fahrenheit to celcius
4. Write C++ program and take two numbers from user and swap the values without using third variable.
5. Write a C++ program that will ask user to input multiple strings and display the same.
6. Write a program to accept no. of seconds and display its equivalent no. Of hours, no of minutes and no. Of seconds.
7. Write a program to find the value of s, the distance travelled by an object.  
 $s = ut + 0.5at^2$   
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%  
Deductios  
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 C++ program to reverse a number
10. Write a C++ program to built simple calculator using switch Statement

1. Write a program to create an inline function which will find the maximum from two variables. Function must be with argument. Use class and function

2. Write a c++ program to print following pattern using class and Function

A

B B

C C C

D D D D

E E E E E

3. Write a c++ program to calculate area of circle . Redious value must be default.(use class and function)

4. Write a C++ program to generate Fibonacci series using user define function.

5. Write a c++ program to find fectorial of a given number using class and function

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**Practicals on OOP**

Write a program to find the largest of three numbers using conditional operator.

Write a C++ program to reverse a number:

Write a C++ program to check whether a number is palindrome or not.

Write a C++ program to check whether a number is prime or not.

Write a C++ program to print Fibonacci series.

Write a C++ program to add numbers entered by user until user enters 0.

Write a C++ program to display integer from 1 to 10 except 6 and 9.

Write a C++ program to Print First 10 Natural Numbers.

Write a C++ program to Read Two Integers M and N & Swap their Values .

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**FCAIT – BCA SEM – 2**  
**Practical on OOP**  
**LAB Excercise - 4**

1. Write a program to create two 2D array and pass it to the function sub . Sub function will calculate the subtraction of the matrix.
2. Write a program to create an array of 10 elements and pass it to the function sort. Sort function will sort the array and display it in sorted order.
3. Write a program to create a 2D array and pass it to the function diagonal. Diagonal function will display all diagonal elements and sum of diagonal elements if the pass matrix is square matrix.
4. Write a program to create a menu driven program to perform operation on square matrix
  1. Enter matrix elements
  2. Print matrix elements
  3. Print Upper Triangular matrix
  4. Print Lower Triangular matrix
  5. Diagonal Matrix
5. Write a program to declare an array of 5 elements and pass it to the function copy and positive. Copy function will copy all the array elements into new array and positive function will find all the positive values from the array.
6. Write a program to create two 2D matrix and pass it to the function . Function will multiply two matrices if the matrix multiplication condition is matched.