MCA - I
Practical Assignment – I
Object Oriented Concepts and Programming

Note : (1) **Programs should have proper validations for the inputs**
 (2) **Use proper variable names**
 (3) **Program should contain program definition as comments and should have proper Indentation**

Classes , Objects , Functions

1. Write a program to create class Student with student's rollno, name and marks of three subjects (OOCP, AI and MF) and display the details of student with total marks of all subjects along with the percentage in proper format.(Output should be in descending order of percentage.
2. Write a program to create class Num (int n1, int n2, int n3, int n4). Display total and average of n1, n2, n3 and n4.
3. Write a program to create class Time (int h, int m). Read a value as minutes from user to display new time after adding the value to minutes in Time.
4. Write a program to create class Date (int day, int month, int year). Read a value as day from user to display new date after adding the value to day in Date.
5. Write a program to create class employee with employee's id, name and basic salary. Calculate gross salary for each employee(HRA 20%, DA 30%, OA 10%).
6. Write a program to define a class called book. Write a program to read information about 10 books and display books details in ascending order of price in proper format.
7. Demonstrate the use of static variables in a class by using it to count the number of times the value is being inputted in the program.
8. Create class STUDENT having rollno, name and age as data members, also take subject with three subjects and initialize their value with minimum passing marks. Using member function, modify marks of student with specific rollno which is given by user.
9. Define a class to represent a bank account. Include the following members :

DATA MEMBERS	MEMBER FUNCTIONS
Name of depositor	(1) To assign initial values
Account Number	(2) To Deposit the amount
Type of Account	(3) To withdraw an amount after checking the
Balance amount in account	(4) To display name and balance

   Write C++ program to handle 10 customers.
10. Write a program to create class 'Search' having data members (int a[ ], x) and define member functions as void input(), void output(), void search(int position), void add(int value) to display result.