**List of OOCP Programs**

1. C++ program to create a simple class and object and print “HELLO”.
2. Create a class programming with two methods. Input\_value for getting value of data and output\_value for printing data using class and objects.
3. Create a class “students”. Create two methods for input and output of students roll number, name, marks1, marks2, marks3, sum of marks and average of marks.
4. Swapping of two number without using third variable.
5. Swapping of two number using “call by values”.
6. Swapping of two number using “call by Reference”.
7. Find the maximum number using “Return by reference”.
8. Replace the first character of the string using “Return by reference”.
9. Find the cube of number using “INLINE” function.
10. Perform the arithmetic operations using “INLINE” functions.
11. Even or odd. Program to enter an integer and find out if it is even or odd
12. Sum and average. Program to enter two integers and find their sum and average.
13. Prime or composite. Program to enter an integer and print if it is prime or composite.
14. Sum, difference, product and quotient of two integers. C++ Program to find the sum, difference, product and quotient of two integers.
15. String length Program to enter a string and find its length.
16. Biggest integer using IF. Program to enter three integers and output the biggest integer using IF
17. Compute Net salary of each employee Given that an EMPLOYEE class contains following members: data members: Employee number, Employee name, Basic, DA, IT, Net Salary and print data members. Write a C++ program to read the data of N employee and compute Net salary of each employee (DA=52% of Basic and Income Tax (IT) =30% of the gross salary)
18. Print USN, print the USN, Name and the average marks Define a STUDENT class with USN, Name and MARKS in 3tests of subject. Declare an array of 10 STUDENT objects. Using appropriate functions. Print USN, print the USN, Name and the average marks of all the students.
19. Addition of two numbers using “public” data and public member function.
20. Addition of two numbers using“private” member function.
21. Print the values of number using “protected” data member.
22. Calculate the area of circle using default value in argument.
23. Sum, difference, product and quotient of two integers. C++ Program to find the sum, difference, product and quotient of two integers using INLINE function.
24. Calculate area of circle, rectangle, triangle and square using Function Overloading.
25. Find the Area of circle using Friend Function.
26. Find the Addition of two numbers using Friend Function.
27. Find the area of circle and assign the value of pie in constructor.
28. Pass the values in constructor and find the difference between two numbers.
29. Write a C++ program to create a class called STUDENT with data members USN, Name & Age. Using inheritance, create the classes UGSTUDENT & PGSTUDENT having fields as semester wise average age for all UG & PG student separately.
30. Write a C++ program to create a class called STUDENT with data members EnrlNO, Name & Sem. Using inheritance, create the classes INTERNAL & EXTERNAL having fields as marks wise average marks for all INTERNAL & EXTRENAL exams separately.
31. Write down a program of pointer that accept the values of variable and print the address of that variable.
32. Print the values and address of array using pointer to array.
33. Write a program using pointer to object. Create a class Bill. Take data members Quantity, Price and Total. Calculate total (Quantity \* Price) in QtyCal functions.
34. Write a program using pointer to pointer. Create a class Bill. Take data members Quantity, Price and Total. Calculate total (Quantity \* Price) in QtyCal functions.
35. Write a program using pointer to derived class. Create a base class and child class that get and print the values of X and Y.
36. Write a C++ program to create a class STRING and implement the following operations. Display the results after every operation by overloading the operator <<.

STRING s1=”Hello”

STRING s2=”World”

STRING s3=s1+s2(Use Copy Constructor)

1. Write a program of addition of two string using + operator overloading.
2. Write a program of comparison of two numbers using operator overloading.
3. Write a program of increment and decrement operator using unary operator overloading.
4. Print the values of variable using friend function overloading.