CLASS 11 COMPUTER SCIENCE (083) PRACTICAL LIST

1. Write a C++ Program to find area & circumference of circle.
2. Write a C++ Program to display ASCII character & vice versa.
3. Write a C++ Program to find greatest of three numbers.
4. Write a C++ Program that print *Fibonacci series* using do-while.
5. Write a C++ Program to check entered number is palindrome or not using while loop.
6. Write a C++ Program that converts binary to decimal.
7. Write a C++ Program that print prime number up to n.
8. Write a C++ Program to print the following series up to n.

1
12
123
1234
12345

9. Write a C++ Program to find roots of quadratic equation using switch.
10. Write a C++ Program to find the sum of sine series

$$\sin(x) = \sum_{n=0}^{\infty} \frac{(-1)^n x^{(2n+1)}}{(2n+1)!}$$

11. Write a C++ Program that converts lowercase letters in a given string to corresponding uppercase letters & vice-versa.
12. Write a C++ Program that calculates the factorial of given number using function, A function should return a value.
13. Write a C++ Program to swap two numbers using *call by value method*.
14. Write a C++ Program to convert distances in feet or inches using *call by reference method.*
15. Write a C++ Program to find number of vowels, consonants, words, spaces, digits & special symbols in a given line of text.

16. Write a menu driven program using function.

MAIN MENU

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1. Linear Search
2. Binary Search
3. Bubble Sort
4. Largest & Smallest Number.
5. Exit

Enter your choice:

17. Write a menu driven program using function.

MAIN MENU

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1.Add Matrix
2.Multiply Matrix
3.Transpose Matrix
4.Norm & Trace
5.Exit

Enter your choice:

18. Write a C++ Program to find sum of rows, columns, primary & secondary diagonal elements of a given matrix.
19. Write a C++ Program to state information of 10 employees &to display of an employee depending upon the employee no. given.
20. Write a C++ Program to illustrate passing structure by value.

10 Write a C++ Program to find the sum of sine series

$$\sin(x) = \sum_{n=0}^{\infty} \frac{(-1)^n x^{(2n+1)}}{(2n+1)!}$$

```
#include<iostream.h>
#include<math.h>
void main()
{
    int i = 2, n, s = 1, x, pwr = 1, dr;
    float nr = 1, x1, sum;
    clrscr();
    cout<<"\n\n\t ENTER THE ANGLE...: ";
    cin>> x;
    x1 = 3.142 * (x / 180.0);   //to convert angle in to radians.
    sum = x1;
   cout<<"\n\t ENTER THE NUMBER OF TERMS...: ";
    cin>>n;
    for(i=2;i <= n; i+=2)
    {
        pwr = pwr + 2;
        dr = dr * pwr * (pwr - 1);
        sum = sum + (nr / dr) * s;
        s = s * (-1);
        nr = nr * x1 * x1;

    }
    cout<<"\n\t THE SUM OF THE SINE SERIES IS..:    "<<sum;
    getch();
}
```