# Department of Computer Applications
## Cochin University of Science and Technology
### S1 MCA (20-381-0106) C Programming Lab

## Lab Cycle-1(Control Structures)

1. Write a program to find compound interest.
2. Program to convert the temperature in degree Fahrenheit to degree Celsius.
3. Program to find the area and circumference of a circle.
4. Write a program to input two numbers and check whether the first number is divisible by the second number.
5. Write a program to input two numbers and check whether the sum of the numbers is even or odd.
6. Write a program to input two numbers swap their values and find the highest between them.
7. Write a program to input three numbers and find the largest among them.
8. Program to read the marks of 3 subjects and to find the grade based on their average marks.

   if average marks >= 85 , grade = 'A'

   if average marks >= 70 and <85, grade = 'B'

   if average marks >=60 and <70, grade = 'C'

   if average marks >=50 and <60, grade = 'D'

   if average marks <50, grade = 'F'

9. Write a program to check a leap year and print those years between two given years.
10. Write a program to print the even numbers up to N.
11. Write a program to print the first N Fibinacci numbers.
12. Write a program to find the sum of Fibinacci series up to N.
13. Write a program to find how many odd numbers are there in between two numbers.
14. Write program to find the sum of numbers up to N which is divisible by a given number.
15. Write a program to print how many numbers is there between two numbers which is divisible by 7.
16. Write a program to find the average of odd numbers between two numbers.

17. Write a program to find the second largest number from N numbers.
18. Write a program to find the sum of digits of individual number.
19. Write a program to input a number and check whether the number is Armstrong number.
20. Write a program to input a number and check whether the number is palindrome or not.
21. Write a program to print the floyd's triangle.
22. Program to display sum of series 1+1/2+1/3….+1/n
23. Program to evaluate the following:

    sine(x) = x-x^3/3!+x^5/5!..... up to N terms

24. Program to find the roots of a quadratic equation using switch.
25. Program to read two numbers a,b and the operator.

    if operator= '+' then do a + b

    if operator = '-' then do a – b

    if operator = ' * ' then do a * b

    if operator = ' / ' then do a / b

    if operator = ' %' then do a % b

    Otherwise display invalid operator using switch statement.