FOR LOOP

1. Write a program in C to display the first 10 natural numbers.
2. Write a C program to compute the sum of the first 10 natural numbers.
3. Write a program in C to display n terms of natural numbers and their sum.
4. Write a program in C to read 10 numbers from the keyboard and find their sum and average.
5. Write a program in C to display the cube of the number up to an integer.
6. Write a C program to display the n terms of odd natural numbers and their sum.
7. Write a program in C to display a pattern like a right angle triangle using an asterisk. The pattern like :

   ```
   *
   **
   ***
   ****
   *****
   ```
8. Write a program in C to make such a pattern like a right angle triangle with a number which will repeat a number in a row. The pattern like :

   ```
   1
    22
    333
    4444
   ```
9. Write a program in C to make such a pattern like a right angle triangle with the number increased by 1. The pattern like :

   ```
     1
     2 3
     4 5 6
     7 8 9 10
   ```
10. Write a program in C to make a pyramid pattern with numbers increased by 1.

    ```
      1
     2 3
    4 5 6
   7 8 9 10
    ```

11. Write a C program to display the sum of n terms of even natural numbers.
12. Write a C program to calculate the factorial of a given number.
13. Write a program in C to find the sum of the series [1-X^2/2!+X^4/4!-.....].
14. Write a program in C to display the n terms of a harmonic series and their sum.
    1 + 1/2 + 1/3 + 1/4 + 1/5 ... 1/n terms
15. Write a program in C to display the sum of the series [9 + 99 + 999 + 9999 ...].
16. Write a program in C to print Floyd's Triangle.

    1
    01
    101
    0101
    10101
17. Write a C program that displays the n terms of square natural numbers and their sum.
    1 4 9 16 ... n Terms
18. Write a C program to check whether a given number is a 'Perfect' number or not.
19. Write a C program to find the 'Perfect' numbers within a given number of ranges.
20. Write a C program to check whether a given number is an Armstrong number or not.
21. Write a program in C to display a pattern like a diamond.

```
    *
   ***
  *****
 *******
*********
 *******
  *****
   ***
    *
```

22. Write a C program to determine whether a given number is prime or not.

23. Write a program in C to find the prime numbers within a range of numbers.
24. Write a program in C to display the first n terms of the Fibonacci series. Fibonacci series 0 1 2 3 5 8 13 .....
25. Write a program in C to display a given number in reverse order.
26. Write a C program to check whether a number is a palindrome or not.
27. Write a C program to find the HCF (Highest Common Factor) and LCM of two numbers.
28. Write a C program to convert a binary number into a decimal number using the math function.
29. Write a program in C to check whether a number can be expressed as the sum of two prime.
30. Write a C program to check the Armstrong number of n digits.