1. Write a C program to input a number from user and find first and last digit of number using loop.

Example
Input
Input number: 1234
Output
First digit: 1
Last digit: 4

2. Write a C program to input number from user and check number is palindrome or not using loop.

Example
Input
Input any number: 121
Output
121 is palindrome

3. How to find frequency of digits in a given number using loop in C programming.

Example
Input
Input any number: 116540
Output
Frequency of 0 = 1
Frequency of 1 = 2
Frequency of 2 = 0
Frequency of 3 = 0
Frequency of 4 = 1
Frequency of 5 = 1
Frequency of 6 = 1
Frequency of 7 = 0
Frequency of 8 = 0
Frequency of 9 = 0

4. Write a C program to input a number and calculate its factorial using for loop.

Example
Input
Input number: 5
Output
Factorial: 120

5. Write a C program input two numbers from user and find the HCF using for loop.

Example
Input
Input first number: 12
Input second number: 30
Output
HCF of 12 and 30: 6

6. Write a C program to input two numbers from user and find LCM (Lowest Common Multiple) using loop.

Example
Input
Input number1: 12
Input number2: 30
Output
LCM = 60

7. Write a C program to print all Prime numbers between 1 to n using loop.

Example
Input
Input lower limit: 1
Input upper limit: 20
Output
Prime numbers between 1-20: 2, 3, 5, 7, 13, 17, 19

8. Write a C program to print all Armstrong numbers between 1 to n.

Example
Input
Enter lower limit: 1
Enter upper limit: 1000
Output
Armstrong number between 1 to 1000 are:
1, 2, 3, 4, 5, 6, 7, 8, 9, 370, 371, 407

9. Write a C program to print Pascal triangle up to n rows using loop.

Example
Input
Input rows: 5

Output
```
    1
   1 1
  1 2 1
 1 3 3 1
1 4 6 4 1
```


10. Write a C program to print reversed mirrored right triangle star pattern of n rows using for loop.

Example
Input
Input rows: 5
Output

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


11. Write a C program to print equilateral triangle or Pyramid star pattern series of n rows using for loop.

Example
Input
Input rows: 5
Output

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

12. Write a C program to print reverse Pyramid or reverse equilateral triangle star pattern series using for loop.

Example
Input
Input rows: 5

Output

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

13. Write a program in C to print the Floyd's Triangle.

Example
Input
Input rows: 5

Output
1
01
101
0101
10101

14. Write a program in C to display the such a pattern for n number of rows using a number which will start with the number 1 and the first and a last number of each row will be 1.

Example
Input
Input rows: 3

Output
1
121
12321

15. Write a program in C to make such a pattern like a pyramid with a number which will repeat the number in the same row.

Example
Input
Input rows: 4

Output
```
   1
  2 2
 3 3 3
4 4 4 4
```

16. Write a C program to print the given number pattern using for loop.

Example
Input N: 5
Output

```
12345
2345
345
45
5
```