

# Python

1. WAP to print first **n** natural numbers (input n from user).
2. WAP to find sum of first **n** natural numbers
3. WAP to print first **n** natural numbers in reverse order.
4. WAP to input a number and print its factorial.
5. WAP to print Fibonacci sequence till **n**.
6. WAP to print all digits of a number input from user.
7. WAP to find sum of all digits of a number.
8. WAP to find sum of following series given n as input from user  
 $1 + 2! + 3! + 4! + 5! + \dots n!$   
Where **n!** denotes the factorial of number n.
9. WAP to input base and exponent and print result without using inbuilt function pow(use for or while loop).
10. Print following patterns:

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

*****
****
***
**
*

      *
     **
    ***
   ****
  *****
 *****

      *
     **
    ***
   ****
  *****
 *****

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

11. Print following number patterns:

```
1      1      5      1
22     12     44     22
333    123    333    333
4444   1234   2222   4444
55555  12345  11111  55555
```

12. Print following character patterns:

```
A      A      A      A
AB     BC     BB     ABA
ABC    DEF    CCC    ABCBA
ABCD   GHIJ   DDDD   ABCDCBA
ABCDE  KLMNO  EEEEE  ABCDEDCBA
```