Question 1: **Calculate Factorial**

Factorial of any number n is represented by n! and is equal to 1*2*3*....*(n-1)*n.
E.g.-
4! = 1*2*3*4 = 24
3! = 3*2*1 = 6
2! = 2*1 = 2
Also,
1! = 1
0! = 1

Write a program to calculate the factorial of a number.

Question 2:

Print the following patterns using loop :
a.
*
**
***
****

b.
   *
 ***
*****
 ***
   *

c.
1010101
 10101
  101
   1

Question 3: Calculate the average

Write a program that takes integer inputs from the user until he/she presses q (Ask to press q to quit after every integer input). Print average and product of all numbers.

Question 4: Calculate the average

Write a program that calculates the average of all elements in the following array/list

my_list= [1,22,32,12,55,88,76,54,2,1,22,33,44,5,6,6,7,5,0]