

1. Given n print the sum of following series up to n 'th term.

$$1/1! - 1*(1+2)/2! + 1*(1+2)*(1+2+3)/3! - \dots 1*(1+2)*(1+2+3) * \dots *(1+2+3+\dots+n)/n!$$

-For full marks use only one for loop, else you will get 50%.

Input	Output
2	-0.5
3	2.5
4	-5.0

2. **Bonus:** Continually take input unless a -ve number is given. Input will be only 0/1. That is actually binary representation of a number. You have to determine the decimal representation and total number of digits in decimal representation of that number. Input order MSB to LSB.

Sample:

Input	Output
1 0 0 1 0 -1	18 2

3. Given n print the following shape,

Input	Output
4	<pre>***** * * * * * * *</pre>