Write recursive functions to perform the following

1. count\_down(n)

Given a value n, the function prints the value n and count down printing (n-1),…till it prints 0.

1. backwards\_alphabet(letter):

Given an alphabet letter, the function prints the letter and all previous letters till it prints a.

(consider all lower-case letters)

1. factorial(n)

Given an integer n, the function should calculate the factorial of n according to the fomula:

factorial(n)=n\*(n-1)\*(n-2)…\*1

Given that factorial(1)=1

Implement a main function to demonstrate that the functions work as expected.