**Q1. Create the below pattern using nested for loop in Python.**

**gradually increase the number of stars (\*) in rows from 1 to 5 and reduce them 5 to 1 .**

**Answer :**

def print\_stars\_increasing(n, current=1):

if current > n:

return

print('\*' \* current)

print\_stars\_increasing(n, current + 1)

def print\_stars\_decreasing(n):

if n == 0:

return

print('\*' \* n)

print\_stars\_decreasing(n - 1)

# The main function to print the pattern

def print\_star\_pattern(n):

print\_stars\_increasing(n)

print\_stars\_decreasing(n - 1)

# Number of rows for the increasing part of the pattern

n = 5

print\_star\_pattern(n)

Q.2 2. Write a Python program to reverse a word after accepting the input from the user.

Input word: ineuron

Output: norueni

Answer:

word = input("Enter a word: ")

# Reverse the word using slicing

reversed\_word = word[::-1]

# Print the reversed word

print(f"Reversed word: {reversed\_word}")