1.Write a function is\_palindrome(s) that returns True if the input string s is a palindrome (reads the same forward and backward) and False otherwise. "madam" # Output: True "hello" # Output: False "racecar" # Output: True

def is\_palindrome(s):

return s == s[::-1]

# Testing is\_palindrome

print(is\_palindrome("madam")) # Output: True

print(is\_palindrome("hello")) # Output: False

print(is\_palindrome("racecar")) # Output: True

2.Write a function find\_largest(lst) that takes a list of numbers and returns the largest number. numbers = [10, 20, 5, 8, 25, 3]

def find\_largest(lst):

return max(lst)

# Testing find\_largest

numbers = [10, 20, 5, 8, 25, 3]

print(find\_largest(numbers)) # Output: 25

3.Write a function count\_vowels(s) that returns the number of vowels (a, e, i, o, u) in the given string. ("Hello World")) # Output: 3 ("Python")) # Output: 1 ("Beautiful Day")) # Output: 6

def count\_vowels(s):

vowels = "aeiouAEIOU"

return sum(1 for char in s if char in vowels)

# Testing count\_vowels

print(count\_vowels("Hello World")) # Output: 3

print(count\_vowels("Python")) # Output: 1

print(count\_vowels("Beautiful Day")) # Output: 6