Lab 3

1- Write a Python function to calculate the factorial of a number (a non-negative integer). The function accepts the number as an argument

2- Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters

Sample Case:

Input: “The quick Brow Fox.”

Output:

No. of Upper case characters: 3

No. of Lower case Characters: 12

3- Write a Python class to find a pair of elements (indices of the two numbers) from a given array whose sum equals a specific target number.

Sample Case:

Input: numbers= [10, 20, 10, 40, 50, 30, 70], target=50

Output: 0, 3

1, 5

2, 3

4- Write a Python function that takes a number as a parameter and check the number is prime or not.

Note: A prime number (or a prime) is a natural number greater than 1 and that has no positive divisors other than 1 and itself.

5- Write a Python function that checks whether a passed string is palindrome or not.

Note: A palindrome is a word, phrase, or sequence that reads the same backward as forward, e.g., madam

6- Write a Python function to check whether a string is a pangram or not.

Note: Pangrams are words or sentences containing every letter of the alphabet at least once.

For example: "The quick brown fox jumps over the lazy dog"