

11.def factorial(n):

 if n == 0 or n == 1:

 return 1

 else:

 return n * factorial(n-1)

12.def is_prime(num):

 if num < 2:

 return False

 for i in range(2, int(num**0.5) + 1):

 if num % i == 0:

 return False

 return True

13.def is_palindrome(s):

 s = s.lower()

 s = ''.join(e for e in s if e.isalnum()) # Remove non-alphanumeric characters

 return s == s[::-1]

14.def calculate_hypotenuse(side1, side2):

 hypotenuse = (side1**2 + side2**2)**0.5

 return hypotenuse

15.def character_frequency(string):

 frequency_dict = {}

 for char in string:

 if char.isalnum():

 frequency_dict[char] = frequency_dict.get(char, 0) + 1

 for char, frequency in frequency_dict.items():

 print(f'Character: {char}, Frequency: {frequency}')