Assignment 3

1. **Question 1: Sum of Even Numbers**
   Write a Python function called `sum_even_numbers` that takes a list of integers as an argument and returns the sum of all even numbers in the list.

2. **Question 2: Factorial of a Number**
   Write a Python function called `factorial` that takes an integer `n` as an argument and returns the factorial of that number.

3. **Question 3: Palindrome Checker**
   Write a Python function called `is_palindrome` that takes a string as an argument and returns `True` if the string is a palindrome (reads the same backward as forward), and `False` otherwise.

4. **Question 4: Prime Number Checker**
   Write a Python function called `is_prime` that takes an integer as an argument and returns `True` if the number is a prime number, and `False` otherwise.

5. **Question 5: Fibonacci Sequence**
   Write a Python function called `fibonacci` that takes an integer `n` as an argument and returns a list containing the first `n` numbers of the Fibonacci sequence.

6. **Question 6: Count Vowels in a String**
   Write a Python function called `count_vowels` that takes a string as an argument and returns the number of vowels in the string.

7. **Question 7: Reverse a List**
   Write a Python function called `reverse_list` that takes a list as an argument and returns a new list that is the reverse of the original list.

8. **Question 9: Unique Elements**
   Write a Python function called unique_elements that takes a list as an argument and returns a new list containing only the unique elements from the original list.

9. **Question 10: String Anagram Checker**
   Write a Python function called are_anagrams that takes two strings as arguments and returns True if the strings are anagrams of each other (contain the same characters in a different order), and False otherwise.