Python Functions and Conditions Practice Questions

Functions:

- 1. Write a function that takes two numbers as parameters and returns their sum.
- 2. Write a function that takes a list of numbers and returns the largest number in the list.
- 3. Create a function that checks if a given string is a palindrome (reads the same forward and backward).
- 4. Write a function that takes a number as input and returns True if it is even, and False if it is odd.
- 5. Write a recursive function to calculate the factorial of a number.
- 6. Create a function that takes a list and returns a new list with only the unique elements (removing duplicates).
- 7. Write a function that accepts a string and returns the number of vowels in the string.
- 8. Create a function that takes two parameters: a list of integers and a target sum. The function should return True if any two numbers in the list add up to the target sum.
- 9. Write a function that converts Celsius to Fahrenheit and vice versa. The function should take two arguments: the temperature and the scale (either 'C' or 'F').
- 10. Create a function that accepts a list of numbers and returns a list of their squares.

Conditions:

- 1. Write a function that takes an integer and prints 'Positive' if the number is positive, 'Negative' if it is negative, and 'Zero' if it is zero.
- 2. Write a function that checks whether a given year is a leap year or not.
- 3. Create a function that checks if a number is divisible by both 3 and 5, returns 'FizzBuzz' if true, 'Fizz' if divisible by 3, 'Buzz' if divisible by 5, and the number itself otherwise.
- 4. Write a function that takes a list of integers and returns True if all the integers are positive, otherwise returns False.
- 5. Create a function that checks if a given character is a vowel or a consonant.