Task 1: Calculator using conditional operators

1. The program asks the user to enter two numbers.
2. Then the program requests the operation to be performed with these numbers (+, -, *, /).
3. The program checks the entered operation and performs the corresponding arithmetic action.
4. If the user tries to perform division by zero, the program displays an error message.
5. The program displays the result of the operation.

Task 2: Calculator using a loop

1. The program enters an endless loop where the user is asked to enter two numbers and select an operation to process them.
2. After the operation is completed, the program outputs the result and asks for input again, allowing the user to continue performing operations without restarting the program.
3. The user can exit the program by entering a special character or command (for example, 'q').
4. The program checks for errors, such as division by zero or incorrect input, and reports these errors, prompting the user to repeat the input.

Task 3: Iteration and Cycles

Write a Python program that uses the for loop and the range function to output numbers from 1 to 20, inclusive. Make sure that each number is printed on a new line.

Task 4: Working with Lists and Loops

Create a list of numbers from 1 to 10. Using the for loop, print the square of each number from the list.

Task 5: Combining Food

Using the provided lists of products (bread, meat, vegetables, sauces), write a program that generates and outputs all possible sandwich combinations. Extract the lists for each product category from the text.

Task 6: Summation Of Numbers

Write a program that counts the sum of all even numbers and the sum of all odd numbers from 1 to 100. The program must output both amounts separately.

Task 7: The Factorial Of The Number

Implement a Python program that asks the user for a number and calculates the factorial of that number. Recall that the factorial of the number n (denoted as n!) is the product of all positive integers from 1 to n.