# **User-defined sub programs**

# 1. Greeting procedure:

Create a procedure called greet(name) that takes a name as input and prints a personalised greeting message (e.g., "Hello, [name]!").

In your main program, call the greet function multiple times with different names passed as arguments.

#### 2. Area Calculator:

Create functions named calculate\_square\_area(side\_length) and calculate\_rectangle\_area(length, width) that take appropriate parameters and return the calculated area for a square and rectangle, respectively.

In your main program, call these functions with user-provided dimensions and print the results.

# 3. Simple Math Operations:

Create functions for basic math operations like add(x, y), subtract(x, y), multiply(x, y), and divide(x, y) (handle division by zero error).

In your main program, prompt the user for two numbers and call the appropriate function based on their choice of operation (addition, subtraction, multiplication, or division).

#### 4. Text Statistics:

Create a function analyse\_text(text) that takes a string as input and returns the number of words and characters in the text.

In your main program, prompt the user for some text and call the analyse\_text function to display the word and character count.

#### 6. Password Validation:

Create a function validate\_password(password) that takes a password string as input and checks its validity based on certain criteria – over 8 characters and containing both letters and numbers.

The function should return True if the password is valid and False otherwise.

In your main program, use a loop to keep asking the user for a password until they enter a valid one according to the function's criteria.