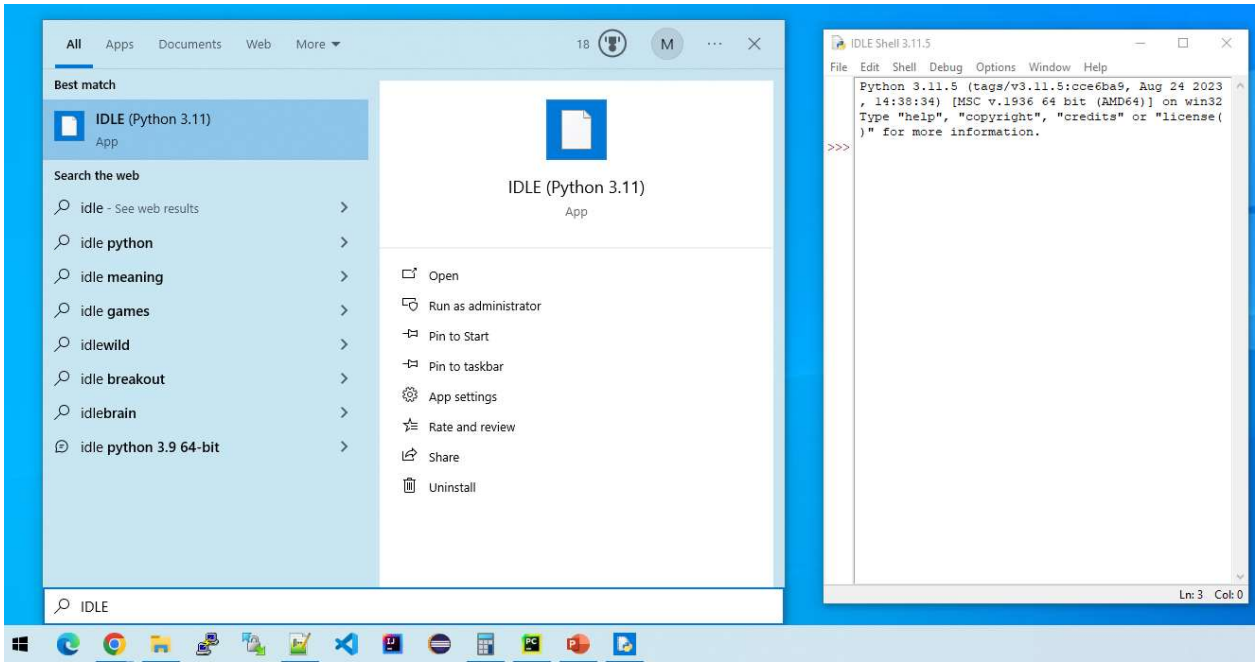
Lab 1

Overview

In this lab we will write our first program, a very simple calculator. This will help us to deal with Inputs and Outputs, and execute simple expressions.

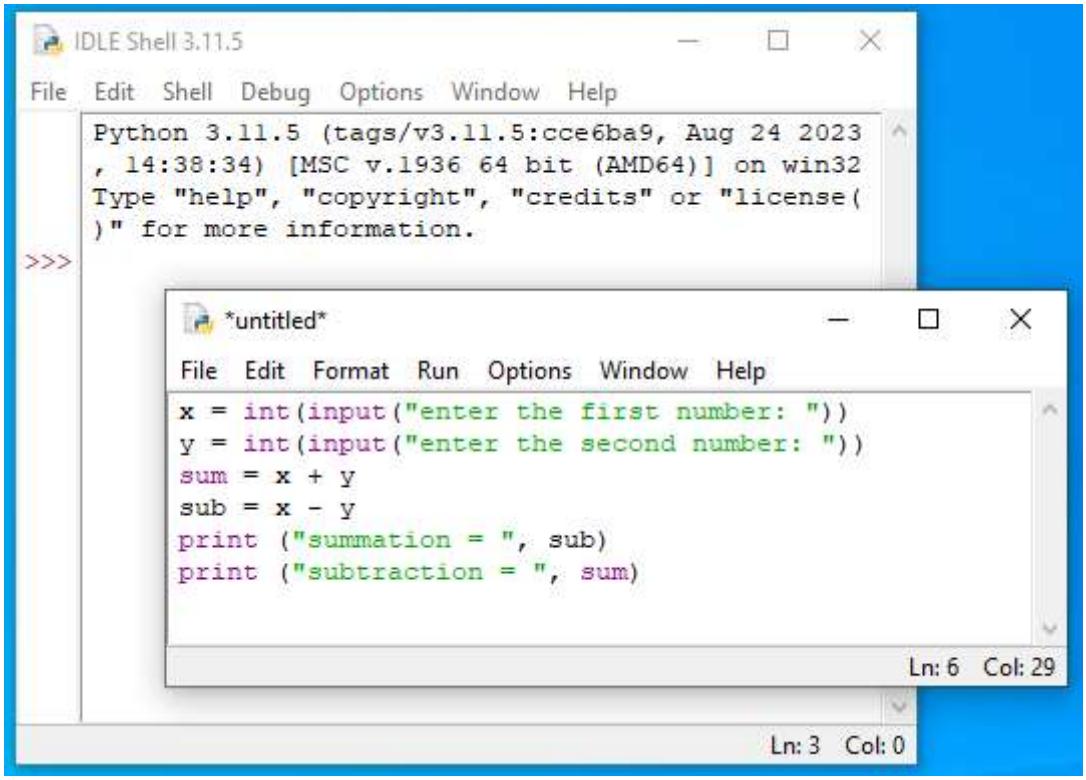
Prerequisites

- Install the latest version of Python that you can download it from here https://www.python.org/downloads/
- Run Python IDLE Program.
  This is a simple Integrated Development Environment (IDE) that comes by default when installing Python. You can use it or use any IDE that supports Python such as PyCharm



Steps

1. From Windows start menu, Open Python IDLE
2. Go to the File menu and select "New File"
3. Copy the following program to the window



4. Go to the File menu and select "Save", and save the program at the Desktop. Please use your student-id as the name of the file, and use "py" as an extension to the program
5. Go to the Run menu and select "Run Module". Your program will run and will ask you to enter the first and the second number and it will print their summation and subtraction.

Exercise 1:

- **Find the error in this program?**
- **What is the type of error in this program?**
- **Please fix that error, and run the program again**

Exercise 2:

- **In the program instead of entering numbers to the program, try to enter any string values such as your name**
- **What is the output of the program?**
- **What is the type of error in this program?**

Optional Step:

- Is there a way to handle that type of user mistake?
  If you couldn't find a way, no worries, just wait till the next lecture.

6. Modify the program to print the multiplication and the division of the two numbers
7. Go to the Run menu and select "Run Module" to run the program again
8. Make sure the program takes two values as input and prints four values as outputs. Try it out with multiple values and watch out the results

Exercise 3:

- **In your program enter the values 0 and 0 to your program**
- **What is the output of the program?**
- **What is the type of error in this program?**

Optional Step:

- Is there a way to avoid that error?
  If you couldn't find a way, no worries, just wait till the next lecture.