CS-UY 1114: Lab 1

Getting Started

Welcome to your lab section of CS-UY 1114 for this semester! Labs are a great opportunity to practice what you have learned in class and ensure you understand the material.

This lab assignment will help you get started with writing Python programs on your computer. You will be installing Thonny or any other IDE of your choice (Integrated Development Environments or IDEs). IDEs will allow you to write and test code for the course on your computer.

For this course, you will be submitting code for homework to Gradescope, which is integrated directly into Brightspace. We will be grading your work through Gradescope.

Let's get started! If you have questions, please ask your lab CAs for assistance.

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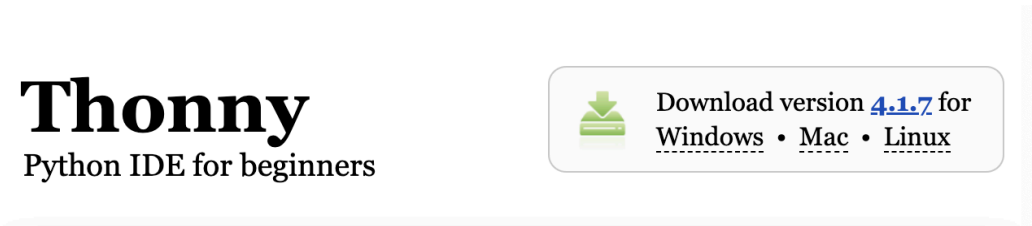
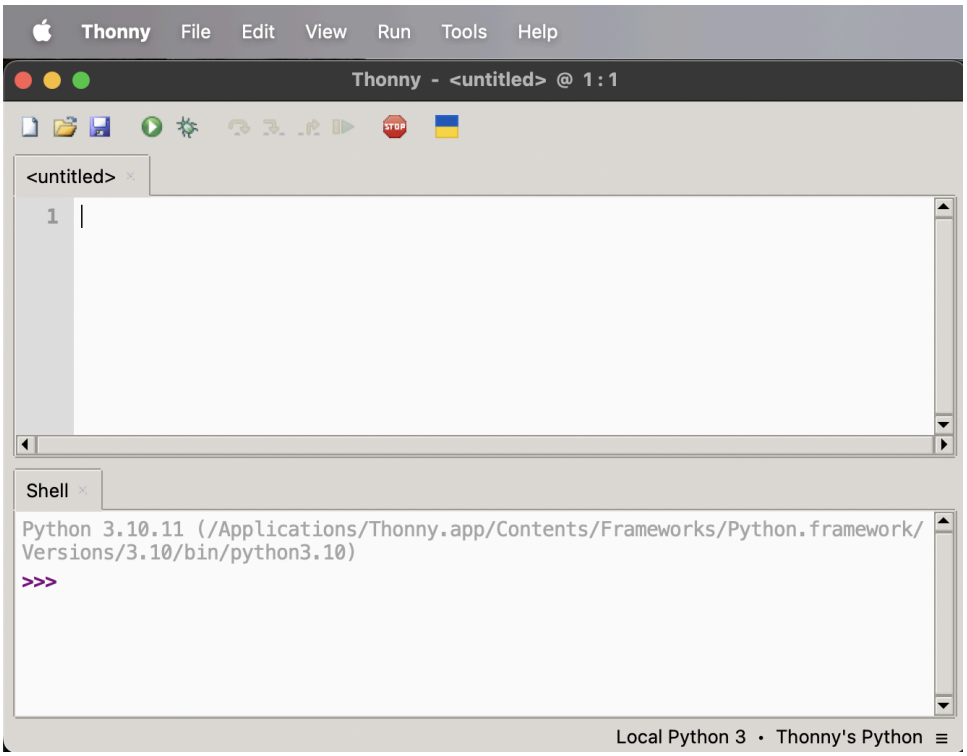
Step 1: Install Thonny

Visit https://thonny.org/. Download version 4.1.7 for your operating system and install the application.



Step 2: Opening Thonny

After installing Thonny, open up the application where you will see this window:



Step 3: Hello World Assignment

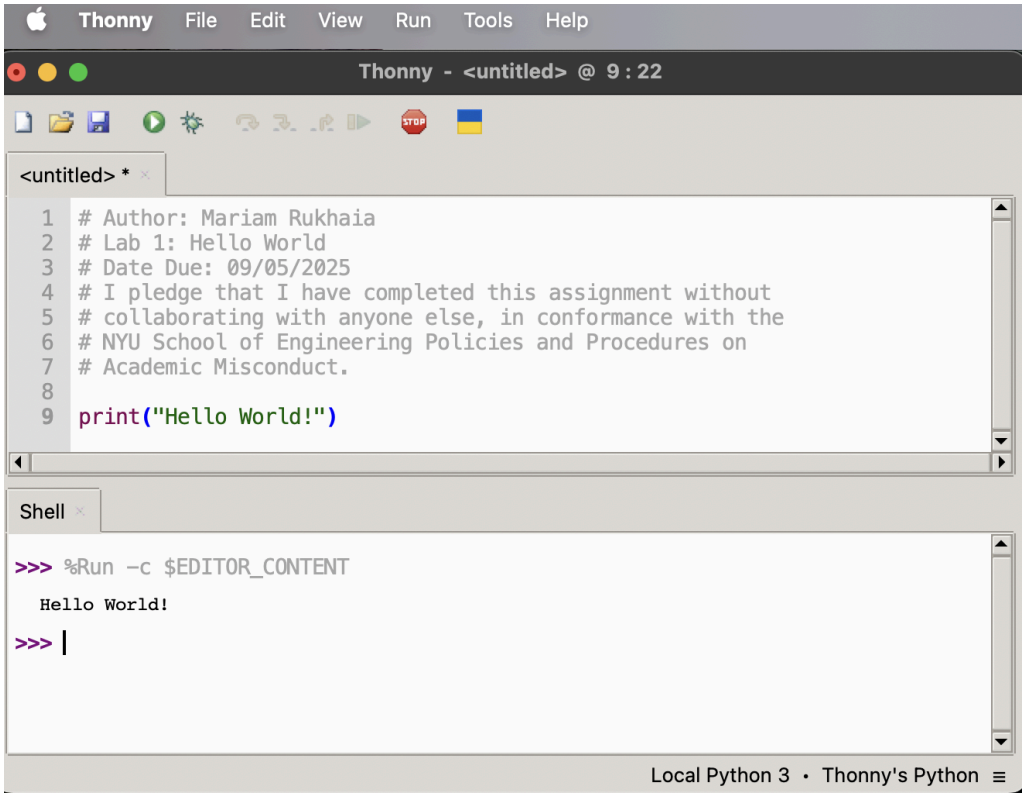
Now that you see an empty, untitled Python file, you can use it to write your first program. First put in the following header that will be required for all files you submit. For homework this helps verify your name and signs the honor code.

```
# Author: <Your Name>
# Lab 1: Hello World
# Date Due: 09/05/2025
# I pledge that I have completed this assignment without
# collaborating with anyone else, in conformance with the
# NYU School of Engineering Policies and Procedures on
# Academic Misconduct.
```

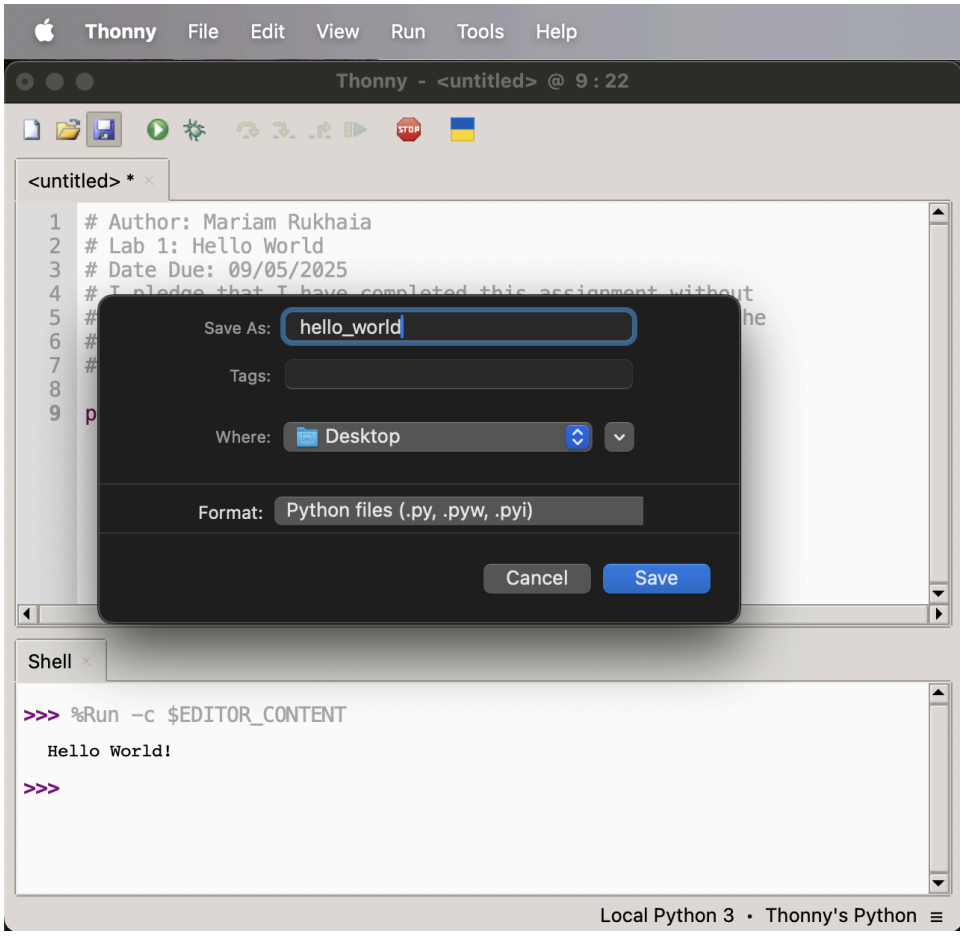
Next, below the header, write the following code snippet.

```
print("Hello World!")
```

Now you should be able to run the code by clicking green Run button.



If you have not already saved the Python file, Thonny will prompt you to save the source code. Save the code somewhere on your computer and name it **hello_world.py**.



Congratulations! You have just completed your first assignment.

Now that you have finished, please get checked by your lab CA so they can check you out.

Step 4: Other IDEs (Optional)

The following IDE, Jet Brains PyCharm, can also be used in this course. You can feel free to install and set it up if you would prefer PyCharm over Thonny.

It is your responsibility to be able to write and run code to submit for this course, whether you use Thonny or another IDE.

Print Statements

You must get checked out by your lab CA prior to leaving early. **If you leave without being checked out, you will receive 0 credits for the lab.**

Before leaving the lab, MAKE SURE TO SUBMIT ALL OF YOUR WORK TO GRADESCOPE. You can follow the Gradescope link from Brightspace and upload your files to the corresponding lab assignment.

Restrictions

The Python structures that you use in this lab should be restricted to those you have **learned in lecture so far.** Please check with your course assistants in case you are unsure whether something is or is not allowed!

If you do not have Python running on your computer, please go back to the first part of Lab 1 and set it up before moving on.

Create a new Python file for each of the following problems.

Your files should be named lab[num]_q[num].py.

Problem 1: Hello CS1114!

For this problem, you will create a friendly multi-line “welcome poster” for yourself!

Print a banner made with symbols of your choice (#, -, *, &, etc.). Within the banner, on separate lines, print “WELCOME TO CS1114!”.

After the welcome message, print your name, major, CS 1114 lecture professor, and one fun fact about yourself (so your CAs can get to know you better!).

The final output of your program should be something like this:

```
################################
#          WELCOME TO          #
#            CS1114!           #
################################

Name: Mariam Rukhaia
Major: Computer Science
CS1114 Professor: Peter DePasquale
Fun fact: I can speak three languages!
```

Problem 2: Academic Integrity Poster

For this problem, write a Python program that will print out a rules poster for academic integrity. Your final output can look like this:

```
 _____________________________
|                             |
|   ACADEMIC INTEGRITY RULES  |
|-----------------------------|
| 1. Do your own work         |
| 2. No unauthorized help     |
| 3. No AI tool submissions   |
|_____________________________|
```

Use ONLY `print(...)` statements (no variables, no loops, no string multiplication). Feel free to add any other rules that comply with NYU's academic integrity and honesty policies.

Problem 3: Student Help Guide

For this problem, you will write a Python program that prints out helpful information for students taking CS1114. You'll be using your syllabus, Brightspace, and Lab 1 slides (Presented during the lab) to look up the answers to common questions about office hours, lab policies, and getting help. Your program must print each question followed by its answer. Make sure to have CAs check your answers to see if you got everything correct.

Here is the sample output with the questions you need to answer:

```
STUDENT HELP GUIDE

Where and when are CA office hours held?

ANSWER

Where can you go for tutoring outside of lab time?

ANSWER

What are the PTC tutoring hours?

ANSWER

After how many minutes will CAs start deducting points if you are late
to the lab?

ANSWER

After how many minutes can CA check your work and let you leave early?

ANSWER

How many points will be deducted for every 10 minutes of lateness?

ANSWER
```