

# Lab Assignment Week 01

*CSC/DSCI 1301 – Principles of CS/DS I*

*Week of January 8<sup>th</sup>, 2024*

## Introduction

Welcome to the first programming lab of CSC/DSCI 1301! Today we will be covering the following topics:

1. Logging into the lab computers
2. Accessing the Lab Assignment on iCollege
3. Setting up your programming environment
4. Writing your very first Python program
5. Submitting deliverables on iCollege

We will also be going over the lab policies and procedures.

- Attendance is mandatory.
- Labs must be completed **individually**.
- TAs are here to help you. Ask them for help!
- Lab assignments are due at midnight on the day of your lab.

## Deliverables:

1. The source code of your program. ( .py files)
2. A screenshot of the output in the terminal of your program

If you have any questions, please do not hesitate to ask your TA. We are excited to get started learning Python with you!

## 1 – How to login to the lab computers?

All GSU students have a university domain account created for them when they first enroll at the university. To access any public-use computer on campus, you can login using your Campus ID and password. This is the same Campus ID and password used to log into PAWS, iCollege, and the GSU Wi-Fi.

- Logging in can typically take a minute or two when it is the first time you have used the computer.
- Although you use the same login for all university computers, your files are not shared between computers! If you move workstations, your files will not be transferred.
- Back up your lab assignments! (Dropbox, Google Drive, OneDrive, etc...)

My advice would be to pick a workstation to use for the semester.

## 2 – How to access the lab assignments?

In the future, you will need to download the lab assignment and any supporting files at the start of each lab from iCollege or Top Hat. Here are the steps for iCollege:

1. Go to <https://icollege.gsu.edu/> in your favorite web browser.
2. Login using your Campus ID and password.
3. Go to our class – Principles of Computer Science I.
4. Click on the **Assessments** Tab.
5. Select the **Assignments** from the dropdown menu.
6. Open the Week 1 Lab Assignment.
7. Download the attached Lab Assignment PDF.

Your favorite browser should save the file into the downloads folder on your lab computer.

## 3 – Setting Up Visual Studio Code

Before you can begin writing your first programs, you will need to set up your Integrated Development Environment (IDE). An IDE is a software application that provides a complete set of tools for writing, editing, debugging, and testing software. IDEs typically include a text editor, a compiler or interpreter, a debugger, and a variety of other tools. IDEs can be very helpful for programmers, as they can save time and effort by providing a single place to do all the tasks involved in software development.

1. First, you will need to open Visual Studio Code on your lab computer.
  - a. Click on the shortcut on the desktop, or search for it by name in the windows search bar.
2. Next, you will need to install the Python Extension
  - a. Open the *Extensions* panel by clicking on the symbol with the 4 squares, press Ctrl + Shift + X on your keyboard.
  - b. Search for “Python” in the extensions search bar.
  - c. Install the extension by Microsoft.

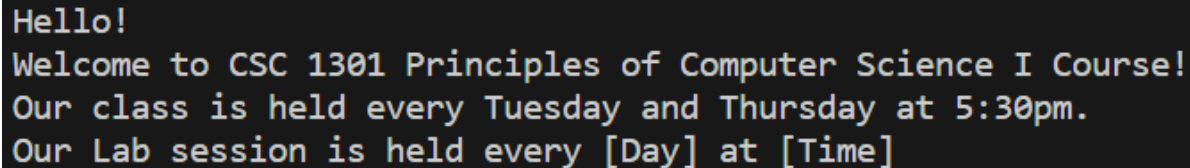
## 4 – Writing your very first Python Program

For your first program in Python, you will need to write a *Hello World* program. This program will display the phrase Hello World! into the terminal when it is executed. You will use the built-in Python print() function to accomplish this. The print() function will display any message surrounded by quotes you that type in between its parenthesis. When you execute/run your program, the message will appear in the terminal.

1. Create a new file.
  - a. Click **New File** in Welcome Tab or Click **File** in the top right corner and select **New File** from the drop-down menu.
  - b. Type in your file name into the text box
    - i. Always end your python file names with .py (Some programs do not add this automatically)
  - c. Choose a location to save your file.
2. Writing your first line of code
  - a. Type in print function – print ()
  - b. Within the parentheses type in your message surrounded by single quotes.
3. After you are done writing your message, executing your program.
  - a. Click the Run (Play) button in the top right corner or press the F5 key.

### Example Output

Your program's output in the terminal should look like the image below.



```
Hello!
Welcome to CSC 1301 Principles of Computer Science I Course!
Our class is held every Tuesday and Thursday at 5:30pm.
Our Lab session is held every [Day] at [Time]
```

### Skills Covered

- Displaying output on the Terminal/Console

### Deliverables

For this program you will need to provide the python file containing your code as well as a screenshot of the output of your program. Please name your files as follows:

- Python Files
  - lastname\_firstname\_filename.py
  - For example: **hawamdeh\_faris\_hello\_world.py**
- Screenshots
  - lastname\_firstname\_filename.png
  - For example: **hawamdeh\_faris\_hello\_world.png**

## 5 – Submitting lab assignments

When you complete your lab assignment, call over your TA to have them verify that you have successfully completed the assignment correctly. Then upload your screenshot and program source code to the iCollege assignment for the Week 1 Lab Assignment. Here are the steps:

1. Go to <https://icollege.gsu.edu/> in your favorite browser.
2. Login using your Campus ID and password.
3. Go to our class – Principles of Computer Science I
4. Click on the Assessments Tab.
5. Select Assignments.
6. Open the Week 1 Lab Assignment.
7. Attach your deliverables.
8. Click Submit.