# Lesson 1.01: Set Up

## Learning Objectives

Students will be able to…

* Define and identify: **IDE**, **Python**
* Identify the key concepts that will be covered in the course
* Set up and log into an account for the course’s online IDE
* Save and turn in a file via the online IDE

## Materials/Preparation

* Update the collaboration policy, IDE information, grading percentages, and general syllabus based on your preferences and your school’s requirements
* Create an account on online IDE and update the student Sign Up Guide with your username
* Update the student Sign Up Guide with file naming and turn-in conventions for your course
* [Sign Up Guide](python_replit_sign_up.md) [Sign Up Guide (Word)](https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/1_unit/replit_student.docx), [Sign Up Guide (pdf)](https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/1_unit/replit_student.pdf): the IDE guide for students
* Student Notebooks

## Pacing Guide

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| **Duration** | **Description** |
| 5 Minutes | Do Now |
| 15 Minutes | Syllabus |
| 10 Minutes | Python/IDE Intro |
| 25 Minutes | Students Create Accounts & Submit Work |

## Instructor’s Notes

### 1. Do Now

* Hand out syllabus for students to begin reading [Sign Up Guide](python_replit_sign_up.md)

### 2. Syllabus

* Guide students through the syllabus, pausing for questions as needed.
* Make sure to note the overarching goals for the course: create functioning Python programs, learn to use basic data types, and learn to use a text-based language.
* Present demo of a program written in Python to hook students and to give them an idea of what they will be working with.

### 3. Python/IDE Intro

#### Introduce Python

* **Python** is a text-based programming language, uses tabbing/indentation to control execution, and is known for its readability.
* Show [Python Code](https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/1_unit/01_lesson/hello_world.py). Ask students to write down at least 3 specific things they observe about the program/code in their notebooks.
* Possible responses might include: indentation, different colors of text, using “print” instead of “say” (Snap).
* Discuss what students observed.

#### Introduce IDE - Integrated Development Environment

* An **IDE** is an application that allows you to create, edit, save, and run programs.
* Point out that for this course we will be using an online IDE.
* Note that with Python, we can’t use drag and drop blocks anymore - it is a language that must be typed into an IDE.
* Talk to students about the different areas and parts of the IDE, use the [Python Code](https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/1_unit/01_lesson/hello_world.py) to demo once more how it looks/works.

### 4. Students Create Accounts & Submit Work

* Hand out the IDE [Sign Up Guide](python_replit_sign_up.md). This explains to students how to sign up for the IDE, step-by-step. Make sure to update this with your account information so that the students share their accounts/work with the correct names.
* Have students write their username and password on the paper and/or take a photo on their phones so that they remember for future classes.

#### Activity (instructor should demonstrate while students are following along on their computers)

* Hello World exercise
* Display [Python Code](https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/1_unit/01_lesson/hello_world.py).
* Have students create a a new Python file
* Save file as “hello\_world.py”
* Have students type in the displayed code into the blank hello\_world.py file
* Have students ‘turn in’ their work by submitting online to Learning Management System(LMS) or whatever method you have decided to have them submit their work. If you would like to have a class-wide convention for file name saving make sure to update it in the [Sign Up Guide](python_replit_sign_up.md).
* If students finish early, encourage them to explore the interface and to try creating a program that prints their name.

## Forum discussion

[Lesson 0.1: The First Day (TEALS Discourse Account Required)](https://forums.tealsk12.org/c/2nd-semester-unit-1/1-01-set-up)