Getting Started with PyCharm

A5.1 Overview

An integrated development environment (IDE) lets you enter, run, and debug your programs. There are several IDEs available for Python. The PyCharm IDE is a professional development tool and is also an option for getting started with Python. Like other Python IDEs, PyCharm lets you enter and run one statement at a time or you can create a program with multiple statements. In this appendix, we'll cover how to get started with PyCharm.

PyCharm is available at jetbrains.com/pycharm. There are two editions: Community is free, and Professional offers a free trial period. There are versions for Windows, Mac, and Linux. This appendix covers installing and using PyCharm Community with Windows 10, but the other versions are very similar.

A5.2 Installing PyCharm

In order to install PyCharm on your computer, visit jetbrains.com/pycharm in a browser. On this page, there is a choice for Download. Once you select this, the download page displays choices for either the free Community edition or the Professional edition. Click on the download button for your desired edition.
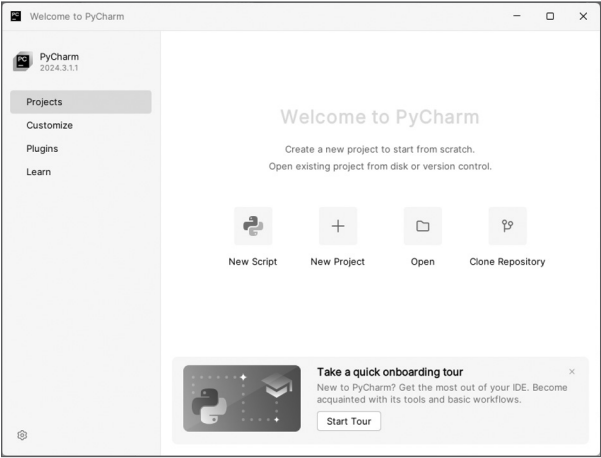
After clicking on the Download button, your browser should download an installer file. In Windows, locate and run this file in order to install PyCharm. You will be presented with a sequence of screens by the installer; you can generally select Next without changing any of the default settings. After several screens, a screen will include an Install button. After selecting this, the installer will take several minutes to install the PyCharm program.

After installing PyCharm, the Windows Start menu will have a folder entry for JetBrains; within this is a choice for PyCharm.
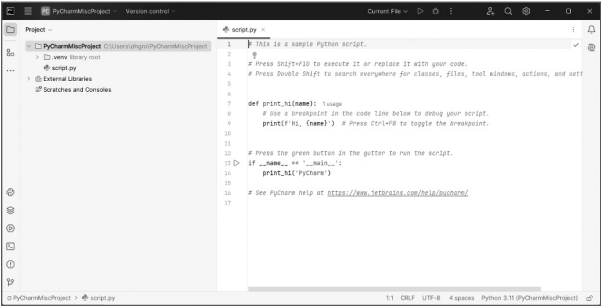
For easier access to PyCharm, you can place it in the Windows taskbar. To do this, right-click on the PyCharm menu entry, then select More, then Pin to the taskbar.

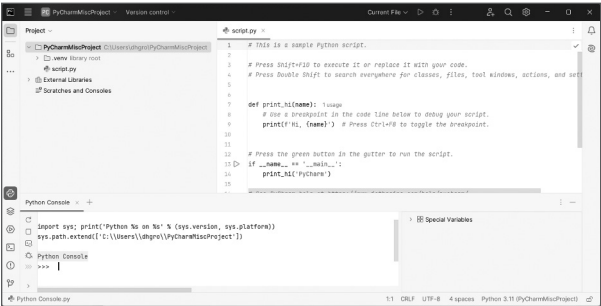### A5.3 Using Python Interactively in PyCharm

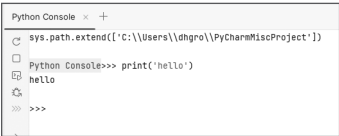When you run PyCharm, the application will look as follows:

From here, you can choose New Script to get started. Next, you will see the PyCharm main screen:

At the left center of the screen is an icon for opening the interactive Python shell (also known as the Python Console in PyCharm). If you select this, this shell will be displayed at the bottom left:

This Python Console is where you can enter one statement at a time and immediately see the result. The >>> prompt indicates that you can enter a statement there. For example, below, a print statement is entered, and Python displays the output result.

In order to clear the shell area, right-click in this area and select Clear All from the menu.

A variable can be set in the interactive shell. For example, below, the variable *sales* is set to 124.5. Unlike the print() example above, setting a variable does not result in output being displayed. In a subsequent statement, the variable can be displayed by simply typing the name of the variable at the >>> prompt.

A5.4 Running Python Programs in PyCharm

In the previous section, we reviewed how single statements can be run interactively in the PyCharm shell. You can also enter multiple lines in a file and run the file as a program. This is done in the top half of the PyCharm screen. You can create a new program file by right-clicking below Scratches and Consoles, then selecting New > Python File. In the small popup window, name your new Python file—for example, "hello."

Next, you can enter your program in the editor window at top right. For example, below, a three-line program is entered:

If you right-click on the program and then select Run 'hello', PyCharm will run the program and its results will be displayed in the Python Console at bottom: