

COSC2429 Intro to Programming

Lab 1: Introduction

Objective: At the end of this lab, you will be able to use PyCharm Edu with Python 3.5 interpreter to write and run a simple Python program. In addition, you will know how to upload your file to Google Drive so that you can download it later from another computer.

Introduction

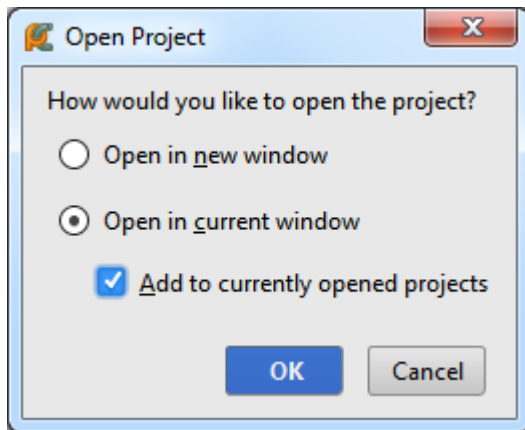
Tutorials provide you with hands-on programming exercises. They will help you apply what you learned from the lectures and prepare you ready for web tests, assignments and final exams. You are highly encouraged to ask your classmates or lecturer for help if you have any issues when working on the exercises.

Exercise 1: Learning Python by yourself in PyCharm Edu

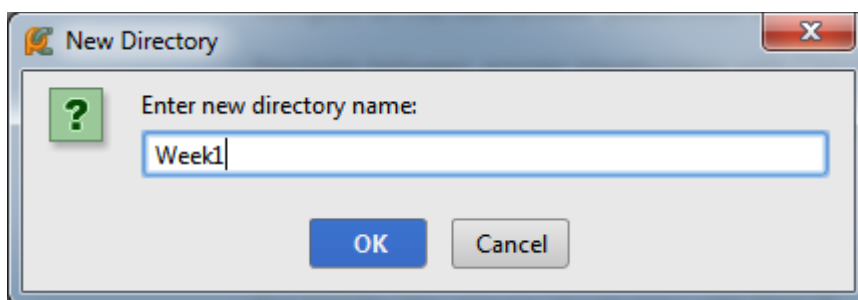
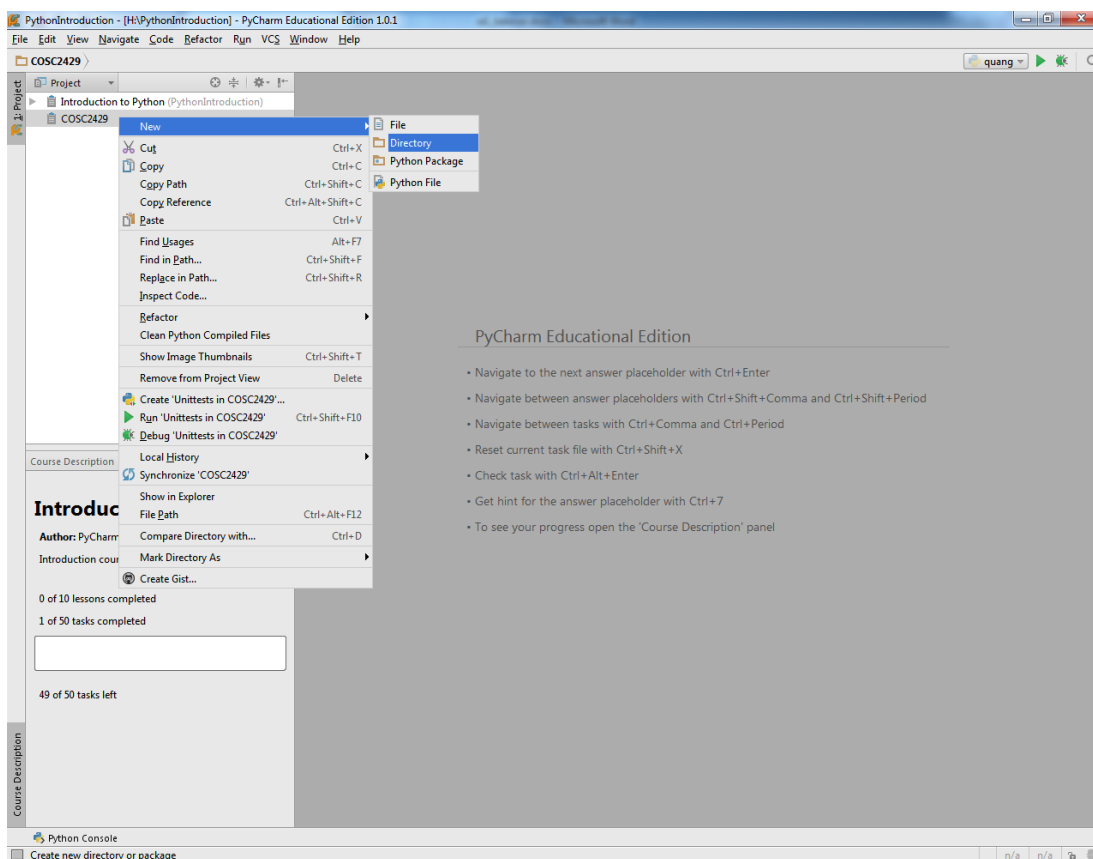
1. Open **PyCharm Edu** in your computer.
2. Click at the project **PythonIntroduction** in the project tree.
3. Complete the first two tasks, i.e. “Our first program” and “Comments”.
4. In the upcoming weeks, please go ahead to complete the rest of the tasks in this project in your own pace. These tasks are mapped quite nicely to the topics we learn in the course.

Exercise 2: Writing your first Python program in a new project

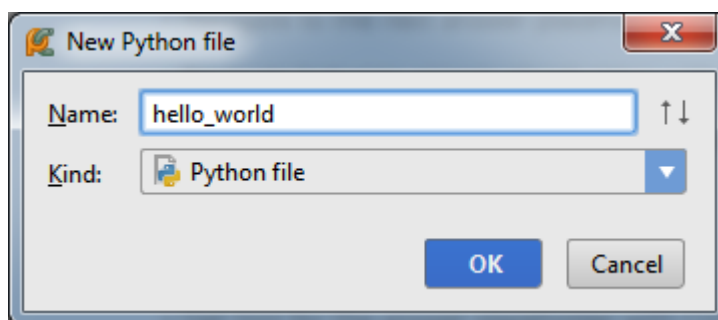
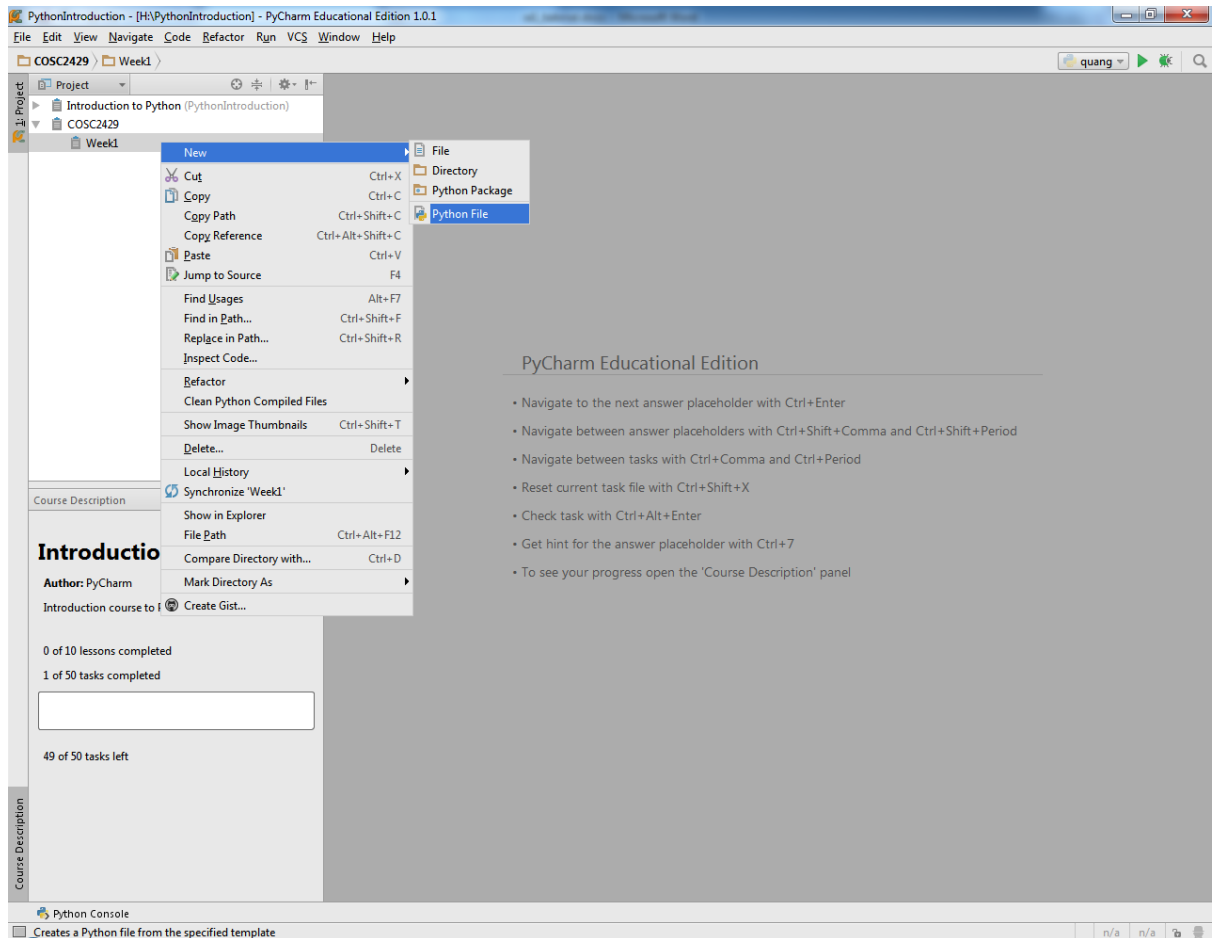
1. Open your **H: Drive** in the lab computer. This is your network drive that is accessible from all RMIT computers.
2. Create a folder **COSC2429** in your **H: Drive** so that you can associate it with a project to store all Python files that you create in this course. Files stored in the **H: Drive** can be accessed from other computers in RMIT network but files stored in the **C: Drive** cannot be.
3. Click at **New Project > Pure Python**.
4. Change the **Location** to **H:\COSC2429** then click at **Create**.
5. Select “Open in current window” and “Add to currently opened projects”



6. Now you have 2 projects opened in PyCharm. Right-click at **COSC2429** > **New** > **Directory** in the project panel then type “**Week1**” to create a directory to store the tutorial exercises of week 1.




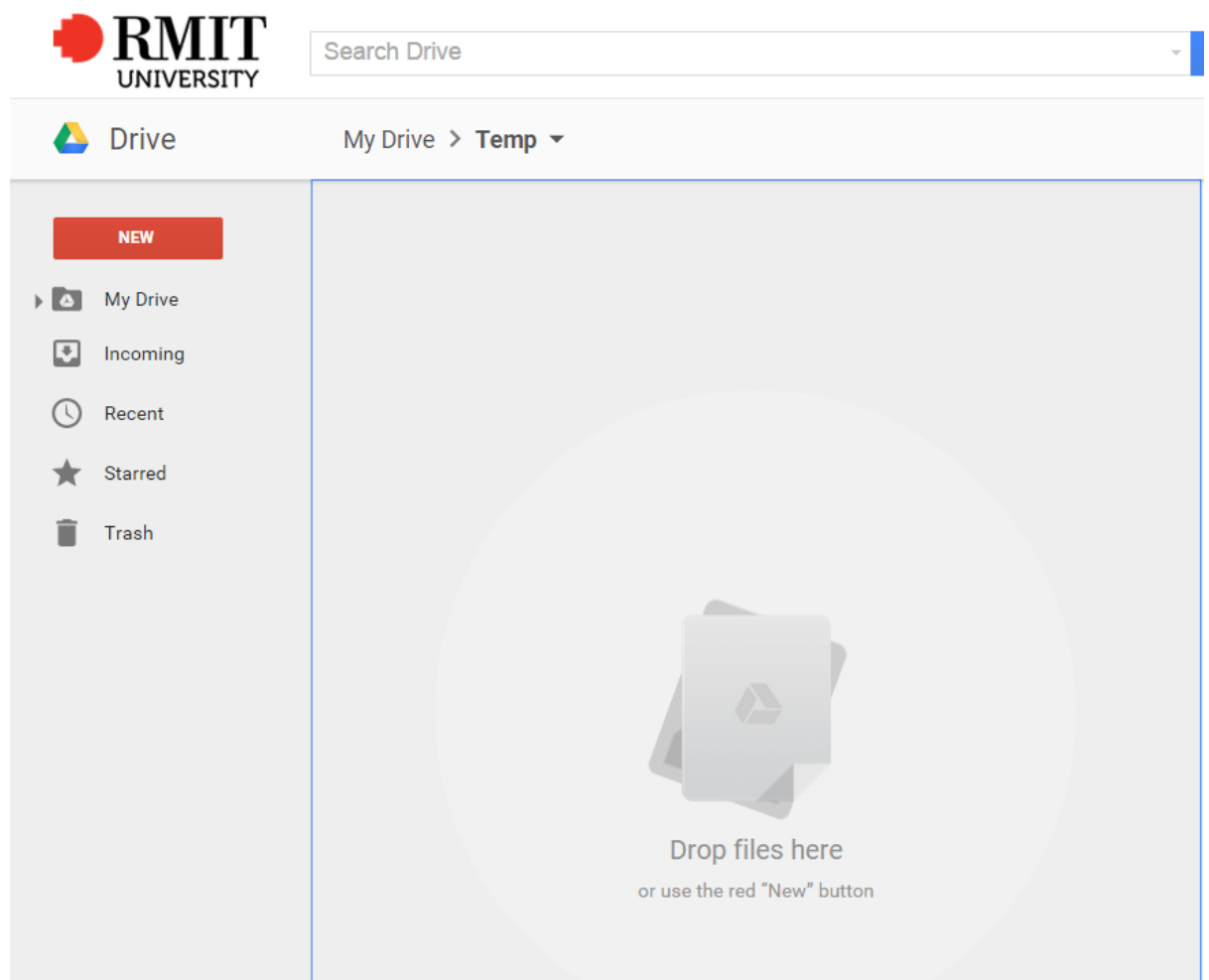
7. Right-click at **Week1 > New > Python file** then type “**hello_world**” for the name of a Python file in the project **COSC2429**. It’s a **convention** in Python that file name should be in **lowercase** only and names with multiple words are linked by underscore “_”.



8. Type up the “Hello World!” program that we had in the first lecture then right-click at the editor panel and select **Run ‘hello_world’** to run the program. The output of the program will be shown in the **output panel**. Does it work for you? If it does, congratulation! You got your first Python program working 😊

Exercise 3: Upload your Python program to your Google Drive

1. Open **Google Chrome** and log in to **Gmail** using your RMIT email and password.
2. Click at  near the top right of the Chrome window then **Drive** to open your Google Drive.
3. Drag-and-drop the folder **COSC2429** in your **H: Drive** from **Windows Explorer** into the open area of your **Google Drive** to upload it.



4. Alternatively, you can click **New > Folder upload** to do the same thing.
5. You can also upload/download files in **Google Drive** conveniently.

Exercise 4: Getting PyCharm Edu working in your personal computer/laptop. This exercise is a homework for you.

1. Go to <https://www.jetbrains.com/pycharm-educational> to download **PyCharm Edu** then install it into your computer/laptop.
2. Download the folder **COC2429** from your **Google Drive** to your computer.
3. Open this Python project from **PyCharm Edu** (can you figure this out by yourself?) and run it.
4. Optional: download **Google Drive App** from <https://tools.google.com/dlpage/drive> and install it in your computer/laptop. After the installation, you'll see a folder named **Google Drive** in your file structure and all folders and files in your Google Drive in the cloud will be automatically synced to this local Google Drive folder and vice versa. This way you don't have to manually download your folders and files from your computer/laptop to your Google Drive in the cloud.

If you have any issues when installing **PyCharm Edu** or running it, please post your question in the Discussion Board.