

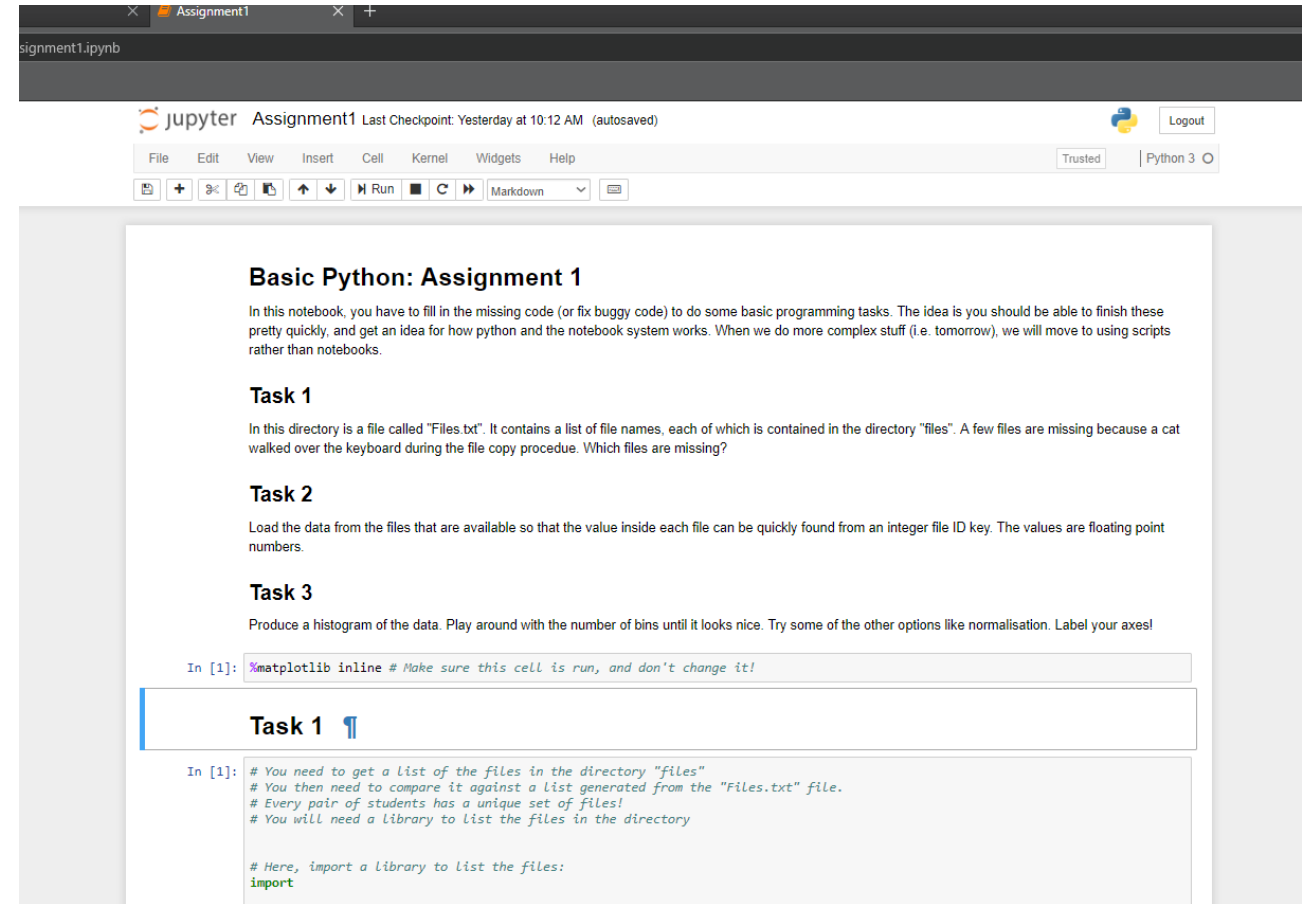
Python Practical 1

Intro

- **Today is not assessed**
 - Play around and get comfortable with python
 - Pick up some tricks to help tomorrow/Thursday
- If you run out of stuff to do, we have some extension tasks

Reminders

- Today we work in Jupyter notebooks
 - Should open in a web browser
 - Interactive environment
 - Code, instructions and notes all in one
- I've written a (hopefully useful) reference notebook
 - It has some filtering functions in that you might need...



Reminders

- To start a notebook, do the following:
 - Open Anaconda Prompt from start menu
 - Navigate to C:\PythonCourse
 - Type 'jupyter-notebook' into the prompt
 - Jupyter should open in the default web browser
 - To kill it, press Ctrl+C in the anaconda prompt
 - If you prefer chrome:
 - Open chrome and set it as default
 - Kill jupyter
 - Re-do the above
- The Browser should have something like a file browser in it, navigate to Day2
- If something doesn't work, or you get asked about tokens, ask for help

Assignment 2

- In this assignment, we do some signal processing
- Using my laptop, we will record your breathing trace
- Then:
 - Load the data
 - Plot the data, try some interesting plotting options
 - Filter the signal to remove noise
 - Identify peaks in the signal
 - Save the figure to put on your fridge

Bonus: give everyone a headache

- We can provide a skeleton code to convert your breathing trace to audio
- It sounds awful
- It is also quite amusing

Bonus: Play games for the rest of the afternoon

- You have to write it first!
- We have a skeleton noughts and crosses game for you to finish off