Welcome to the CSC180 lab!

This lab will introduce you to the tools we will be using throughout the term.

If, at any point, you encounter problems, don't hesitate to ask your TAs for help. They are there to answer all of your questions about the lab.

At the **end of the lab**, you should show your work to a TA. If you have made a good effort towards completing the lab , you will be given full marks for the lab. Make sure that you do not leave before a TA has graded your work.

You must work with a partner – if you cannot find a partner, talk to a TA and they will find you one. At the end of the lab, both partners should be prepared to explain the work to the TA.

Question 1. Logging on to ECF

Your login name is likely your UTORid/JOINid (a username that appears on your T-card). Your initial ECF password is an eight-digit string comprised of the last four digits of your student number, then your birth month as two digits (e.g., March translates to 03), then your birth day number as two digits (e.g., March 5th would give you 05).

Question 2. Konsole, creating shortcuts, and changing passwords

After logging in, you should open a *terminal window*. To do that, press

`Applications->System Tools->Konsole`.

The Applications menu can be found in the top-left corner of the screen.

In the windows that opens, copy and paste the following, and press Enter:

```
ln -s /n/share/copy/csc180f/pyzo-4.2.1/pyzo ~/Desktop/pyzo
```

This will create a shortcut to Pyzo on your desktop.

If you haven't done so already, you should change your password to something other than the initial one. To do that, type `passwd` in the console and press Enter.

Both partners should create a shortcut to Pyzo and change their passwords if they haven't done so already.

Question 3. Your first Python program

Start up Pyzo by clicking the new icon that was created on your desktop in the last question. Click `File->New` to create a new file. Now click `File->Save` in order to save the file. In the dialogue that opens, create a directory called `csc180` in your home folder, then create a directory called `labs` inside `csc180`, and then create a directory called `lab01` inside `labs`. Finally, save your new file as `hello.py`.

Type the following in `hello.py`:

```
print('Hello, Python')
```

Save `hello.py`, and use `Run->Execute file` to run your program and display the message.

Question 4. Greetings

Modify `hello.py` to greet you by your names. For example, if your names happen to be Hermione Granger and Harry Potter, the program should print out the following:

```
Hello, Hermione Granger
Hello, Harry Potter
```

In lecture, we talked about variables. Variables are used, among other things, in order to avoid entering the same information more than once. Use variables to print (again, assuming you are Hermione and Harry) the following without entering either of your names more than once into hello.py

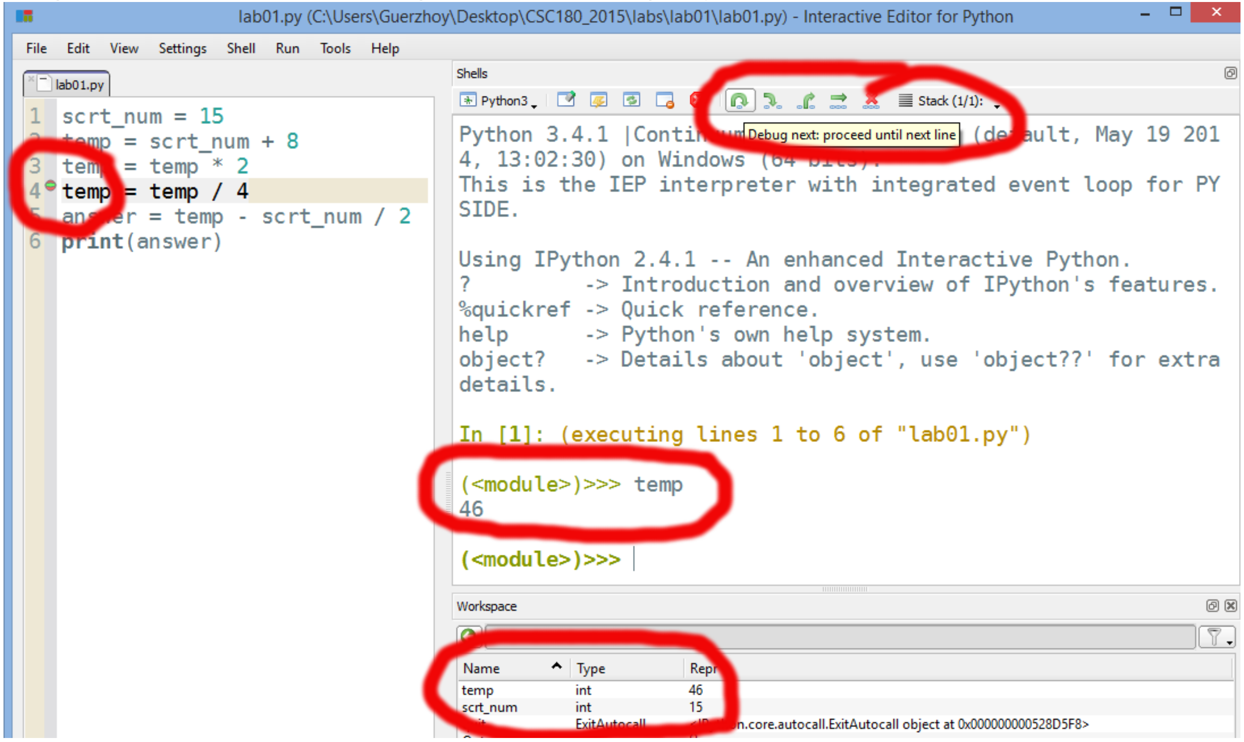
```
Hello, Hermione Granger and Harry Potter. Your names are Harry Potter and Hermione Granger.
Hi there. Your names are still Hermione Granger and Harry Potter.
```

Question 5. Tracing

Modify your program so that, *after printing the greetings*, the values of the variables that contain your names are changed to `Prof. Foster` and `Prof. Thywissen`. Put a breakpoint on line 1 by clicking in the grey area to the right of the digit 1. There should now be a red dot there. Enable to `Workspace` tool by pressing `Tools->Workspace`. Now Trace the code by executing it (using `Run->Execute file`) and the pressing the `Debug next` button and make sure you observe (and can point out to the TA) the change in the values of the variables.

Question 6. More Greetings

Not everybody should be greeted by name. Write Python code that greets by name the person whose name is stored in a variable called `greetee`, except if the person's name is Lord Voldemort, in which case the program should print the message "I'm not talking to you."



lab01.py (C:\Users\Guerzhoy\Desktop\CSC180_2015\labs\lab01\lab01.py) - Interactive Editor for Python

```
1 scrt_num = 15
2 temp = scrt_num + 8
3 temp = temp * 2
4 temp = temp / 4
5 answer = temp - scrt_num / 2
6 print(answer)
```

```
Python 3.4.1 |Conti                                   (default, May 19 201
4, 13:02:30) on Windows (64 bits).
This is the IEP interpreter with integrated event loop for PY
SIDE.

Using IPython 2.4.1 -- An enhanced Interactive Python.
?         -> Introduction and overview of IPython's features.
%quickref -> Quick reference.
help      -> Python's own help system.
object?   -> Details about 'object', use 'object??' for extra
details.

In [1]: (executing lines 1 to 6 of "lab01.py")

(<module>)>>> temp
46

(<module>)>>>
```

Name	Type	Repr
temp	int	46
scrt_num	int	15
exit	ExitAutocall	<IPython.core.autocall.ExitAutocall object at 0x00000000528D5F8>