

# Computer Science 111

## Lab 1: Getting Started

### 1 Welcome!

Welcome to the CompSci 111 lab! In order to complete this lab you need to have your Amherst College userid and your password handy. If you do not have these things, mention it to a TA or professor right away.

In this lab you will learn how to:

1. Make sure your attendance at this lab is noted on the Lab Record sheet.
2. Log on to the Amherst College Linux computers (named remus and romulus).
3. Navigate the Linux system a little bit.
4. Write and execute your first Python program!
5. Have your work checked by a TA or Professor and noted on the Lab Record.

Amherst College provides access to all the tools and software you need to carry out your labs and programming assignments in this course. However you are not required to do the work on the College systems: the IDLE IDE (integrated programming environment) that we use is available as open source, and you can download it onto your own computer if you like. Instructions downloading and installing IDLE appear in Section X.

## 2 Remus and romulus

- How to log in from the lab.
- How to move around

## 3 Writing a Python Program

You will use a Python interpreter called IDLE to write. IDLE reads and executes the Python commands you give it.

You see a “shell window” with some disclaimer text, and three `>>>`. This is the prompt: IDLE is waiting for you to give it an instruction. So try giving it these instructions, one per line.

```
>>>print ("Howdy there!")
>>>print ('My name is (your name)' )
>>>1 + 999
>>>55 + -10
>>>10 * (10 / 5) + 500          # Do the math!
```

See how it obeys your every command?

- Use the **print** command to tell it to print a message to the screen; the message can be in single or double quotes.
- If you type an **arithmetic expression**, IDLE will do the math and tell you the answer.
- The last line has a **comment** marked with a hash: IDLE ignores everything on the line after the hash, so you can use comments to put notes and explanations in your program for human readers. I will use comments to explain things in these lab examples, and you do not have to type them in from now on.

Now try typing some commands with mistakes **syntax errors** in them.

```
>>> print ( 'Hi )           # No quotes
>>> printt ("Hi!")         # Misspelled print
>>> Print ("Hi!")         # Case sensitive
>>> 22 - * 17              # Plus times? Really?
>>> 55,677. 00            # No commas or spaces in a number
```

If the syntax is not perfect, IDLE can't figure out what you want!

**Saving your program** How to edit. How to add comments. How to save it. Try it, then run it from the file.

**Lab Assignment 1-1** Write a three line haiku about computers. Save it. Submit it to the LABs place so TA's can vote on the best one.

### 3.1 Input and Output

```
>>>print (
```