Help Guide 1:
SAGE: Logging-in

This guide will give you step-by-step in instructions to get up and running with SAGE.

You will need: (1) access to the internet, (2) a password which you won't forget.

1.1   Creating an Account on a SAGE server

(1) The easiest way to use SAGE is online, via a SAGE server. We will use a private SAGE server hosted by the Mathematics Department at SFU, so open your browser to:
https://sage.cecm.sfu.ca:8443

(Firefox recommended)

You may be alerted that the "Connection is Untrusted", just click "I understand the is risks" then "Add Exception...". A box will open up, click "Confirm Security Exception".

(2) You should now see a page like this:
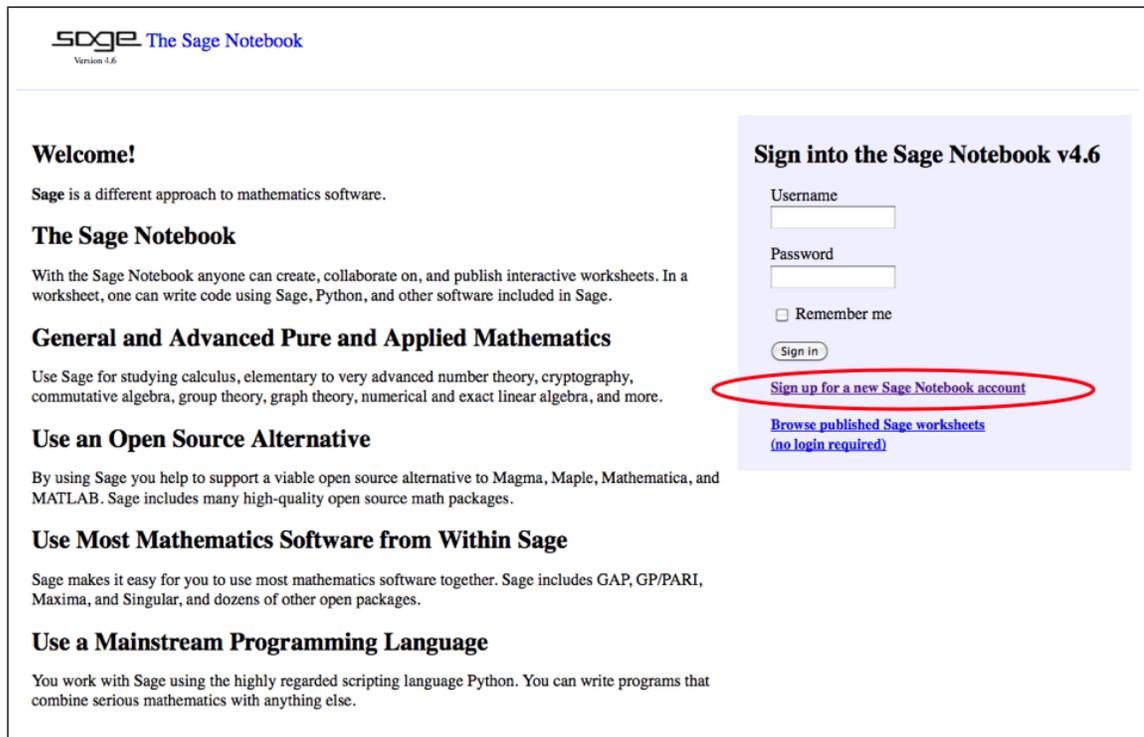
(3) Click "Sign up for a new Sage Notebook account". This is circled in red in the picture above.

(4) We will now create an account.

Username: Use your SFU user name. (this is so I can identify you when I will share worksheets with the class)

password: create a password that you won't forget. It is not recommended that you use your SFU computing password, instead use a new password.

Click "create account".

(5) Your account should now be created and you should see this page (note: you should see your own user name).

(6) Login using your newly created account.

(7) Congratulations, you are now in the SAGE notebook. You should see your username in the middle of the top row. Mine is displayed in the image below.

1.2 Getting Familiar with the SAGE notebook

Once logged-in, you will start in what is essentially your file manager. It will be where all your SAGE worksheets are kept. Right now it is empty since you don't have any worksheets yet. There are two ways to get a worksheet:
(1) create a new one yourself, or
(2) upload an existing worksheet (either from someone else, or one you created on another SAGE server, or local computer).

We'll start by creating a new worksheet.

1.2.1 Creating a New Worksheet

Click the "New Worksheet" link in the top left corner of the screen.

You will be taken into the new worksheet, and asked to rename it.
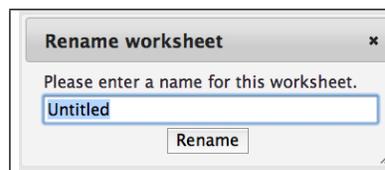
Choose a name to adequately describe the contents of the worksheet. I've just called mine "My First Sage Worksheet". Click "rename".
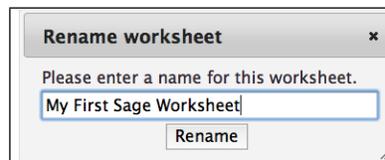
You are now ready to start writing some code. Use your mouse to select the box at the bottom of the worksheet. it should turn blue, and a link "evaluate" should appear below the box.
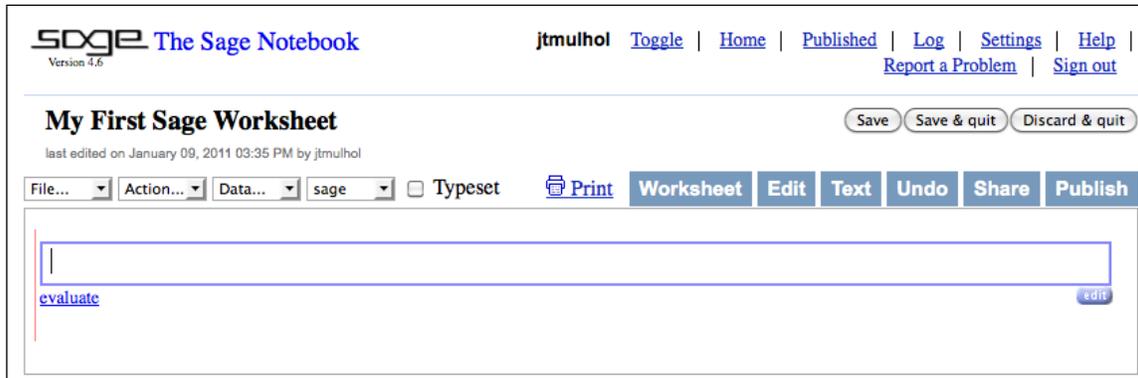
Type something in the box. For example, "2+2", as seen below.
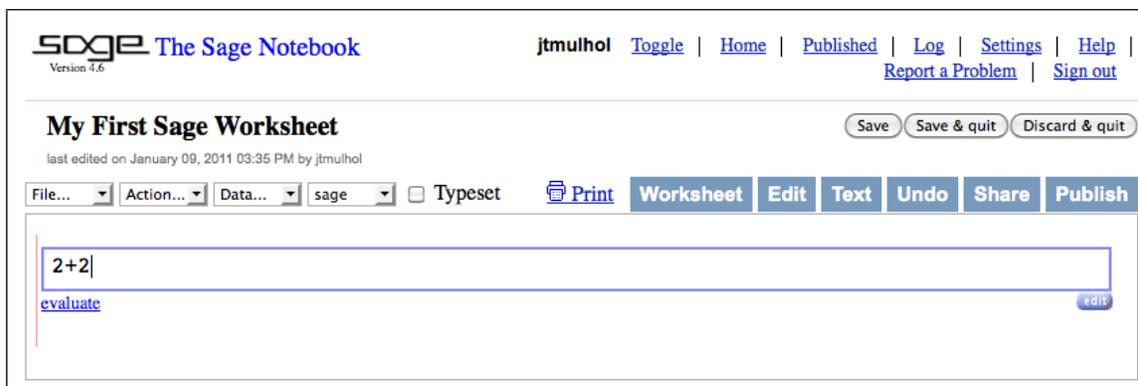
Either click "evaluate" or press [shift-enter] to have SAGE evaluate the input. It should return "4" as output in blue.
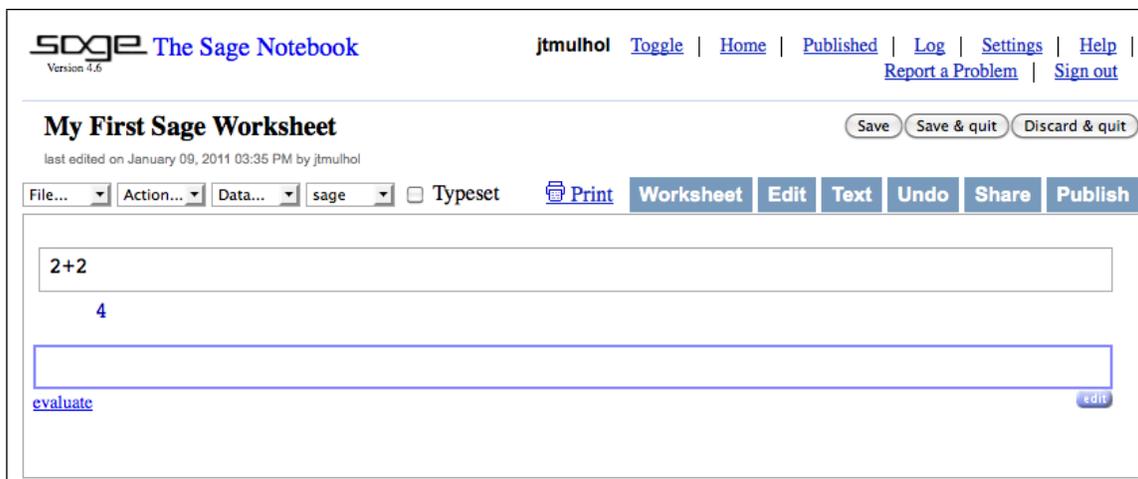
To get back to the file manager, either click "Home" (which keeps you worksheet session still loaded) at the top of the page, or "Save & Quit" (which does exactly what it implies). For example, I pressed "Home" and my file manager is shown below (which indicates my Worksheet is still running).

1.3   Uploading a Worksheet

If you get a worksheet from another location: course website, another website, on a flash memory stick, emailed attachment, etc., you can upload it to your file manager. Just click "Upload". You will be presented with the screen:
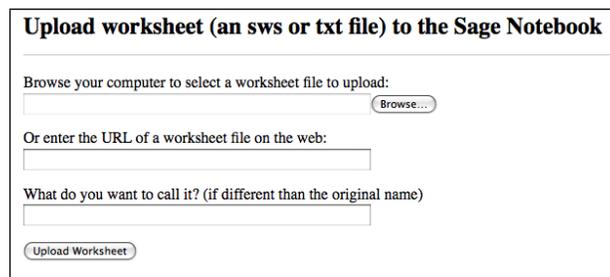
If it is on you computer then browse to it (it will have an "sws" extension). Then click "open". You can rename it if you wish.

It should now be in your file manager, and safely stored on the server so you can access it from anywhere.

1.4   Downloading a Worksheet

To download a worksheet from the server, go into the worksheet you wish to download from the file manager. Once in the worksheet select "File" then "Sage Worksheet to a File".
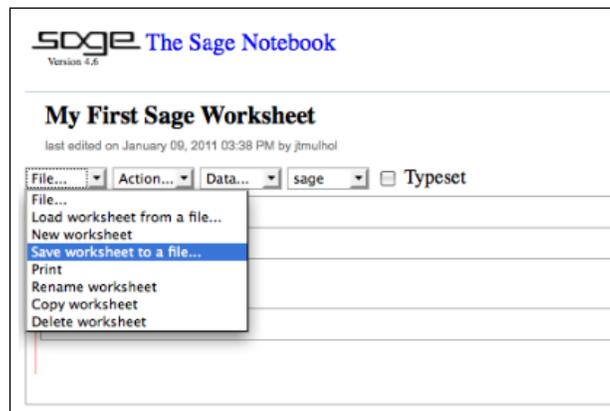
You will be asked to confirm the name (you can change this if you want to, it is just the name it will give to the file). Then it will download the file and give it an sws extension. You can then attach this file to an email,

store it on your hard drive, or flashdrive, etc.

A couple of times during the term you may want to download the worksheets you have created, and store them on your own computer for sage keeping.

We'll now play around with SAGE Lab 1 and see what we can do with SAGE.