# Homework 0

Due Tuesday, August 31

This first homework assignment will walk you through the setup of your CoCalc account, and the general process of submitting the *implementation part* of you homework assignment.

1. Go to `http://cocalc.com` and create an account. Make sure to use you berkeley.edu email adress! If you have already created an account, then go to `http://cocalc.com` and log in.

2. Under the list of projects, there should be one called [Your Name] - math116. Open this project. Notice that the project has two collaborators: Gabriel Dorfsman-Hopkins (that's me!), as well as our grader. Both of us can access and edit any files in this project (as well as the entire history using the time machine feature), this is how we will view and grade your work, as well as helping and troubleshooting.

3. Create a new file by clicking the ⊕new button.

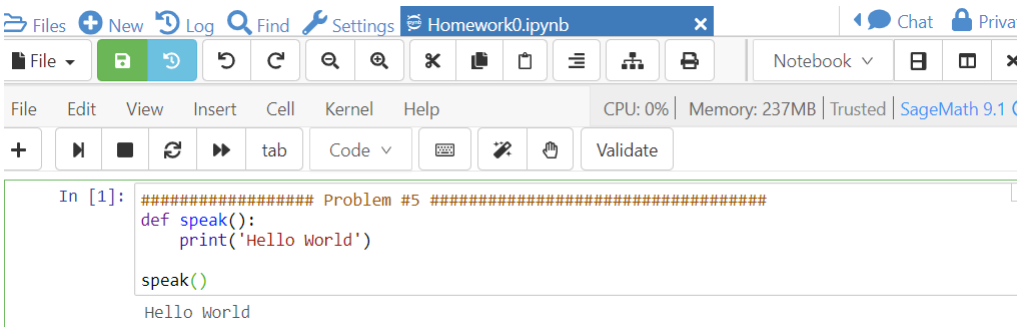
   (a) Name the file Homework0.

   (b) Select the Jupyter Notebook file type (this will automatically give it the .ipynb extension).

   (c) You will be asked to select a kernel. This will be the programming software your Jupyter notebook will execute. Select *SageMath 9.1*. This will be the language we will be using throughout the course. A quick remark, SageMath 9 is an open source software package extending Python 3, so all Python 3 syntax and programming should work as expected.

4. Play around a bit with the Jupyter notebook. It is an input output style of programming that is great for experimentation.

5. *Implementation Problem.* On an input cell in Jupyter, comment out the first line saying "Problem #5". Then create a new function called speak with no inputs. This function should print 'Hello World' when called. Then call speak. Run the cell. It should look something like this:




   Now export the notebook as a PDF via LaTeX. This PDF is what you turn in on Gradescope!

Problem #5 will be the only problem graded on this assignment. If you are having trouble, rewatch the first lecture where I walk through this entire process, and if you are still having trouble send me an email.