

After redeeming your code, you should see a screen like this:

The screenshot shows the Google Cloud Platform Billing Overview page. The top navigation bar includes the Google Cloud Platform logo, a search bar, and several utility icons. The left sidebar contains navigation options: Billing, Overview (selected), Budgets & alerts, Billing export, and Reports. The main content area displays the following information:

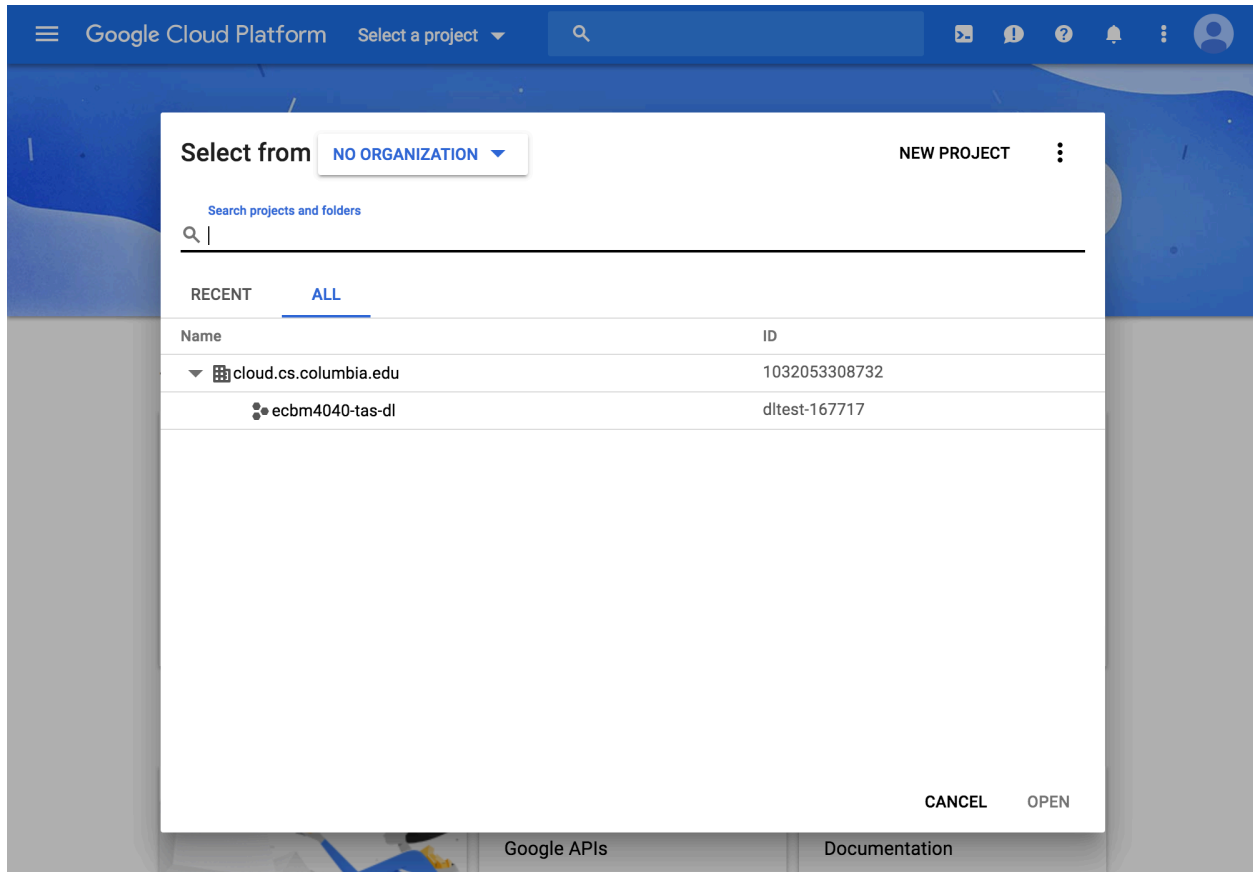
- Overview:** Manage billing accounts, RENAME BILLING ACCOUNT, SHOW INFO PANEL
- Billing account ID:** 014838-6BF02E-66683E
- Organization:** cloud.cs.columbia.edu
- Credits:**
 - \$100.00 Credits remaining:** Out of \$100.00
 - 361 Days remaining:** Ends Sep 24, 2019
- Projects linked to this billing account:** There are no projects linked to this billing account.

Then, head to <https://console.cloud.google.com>:

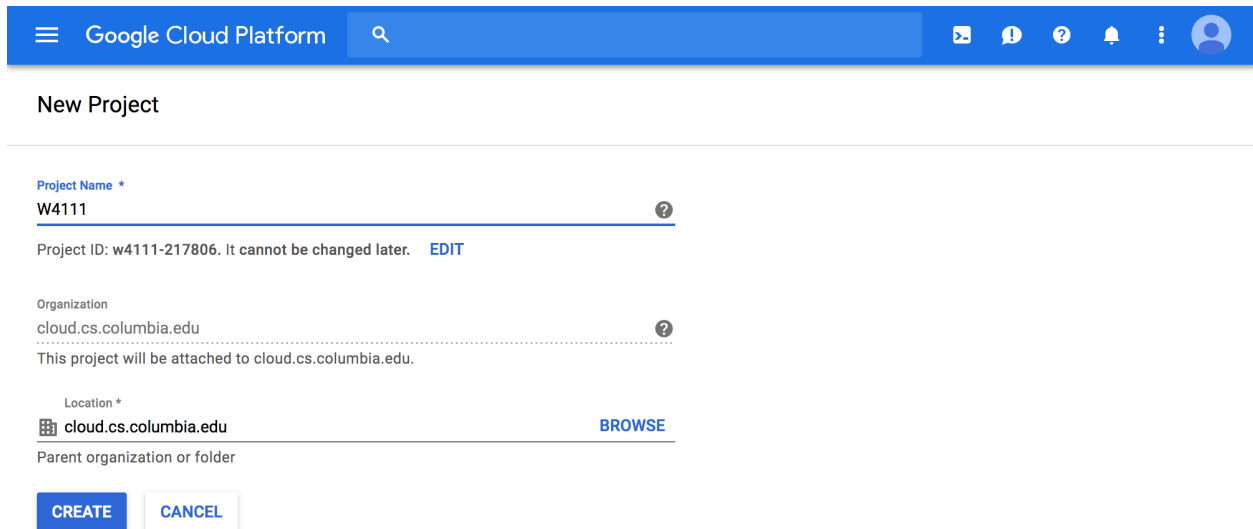
The screenshot shows the Google Cloud Platform console home page. The top navigation bar includes the Google Cloud Platform logo, a "Select a project" dropdown menu, a search bar, and several utility icons. The main content area displays the following information:

- Welcome, Felipe:** Get started with Google Cloud Platform
- Top Products:**
 - Compute Engine:** Scalable, high-performance virtual machines
 - Cloud Storage:** A powerful, simple and cost effective object storage service
 - Cloud SQL:** A fully-managed MySQL/PostgreSQL database service

Click on the arrow symbol right next to "Select a project".



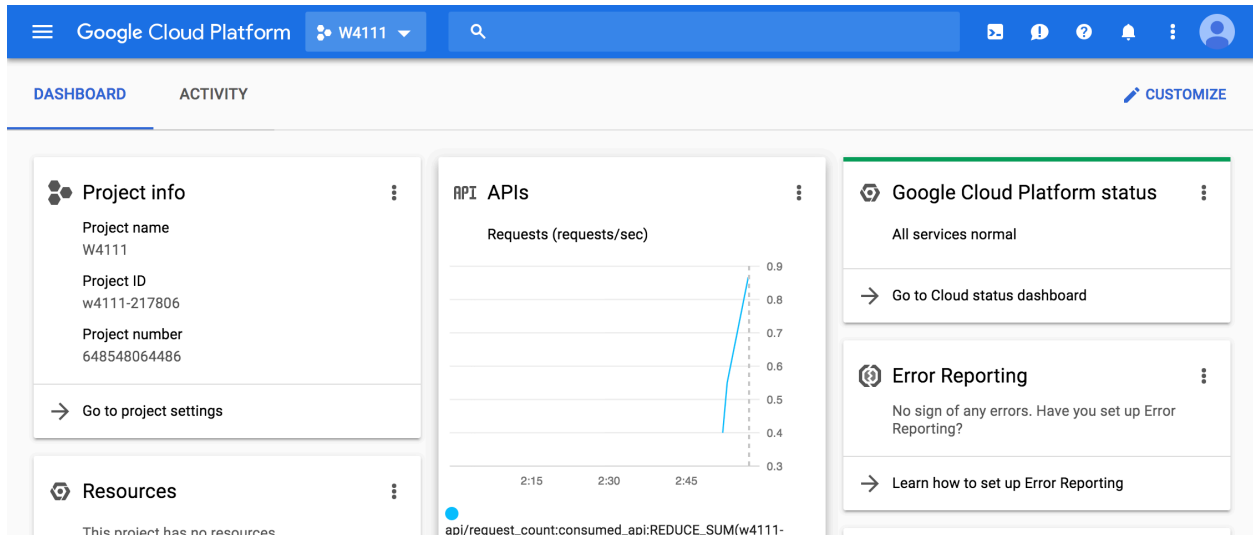
Click on “NEW PROJECT”.



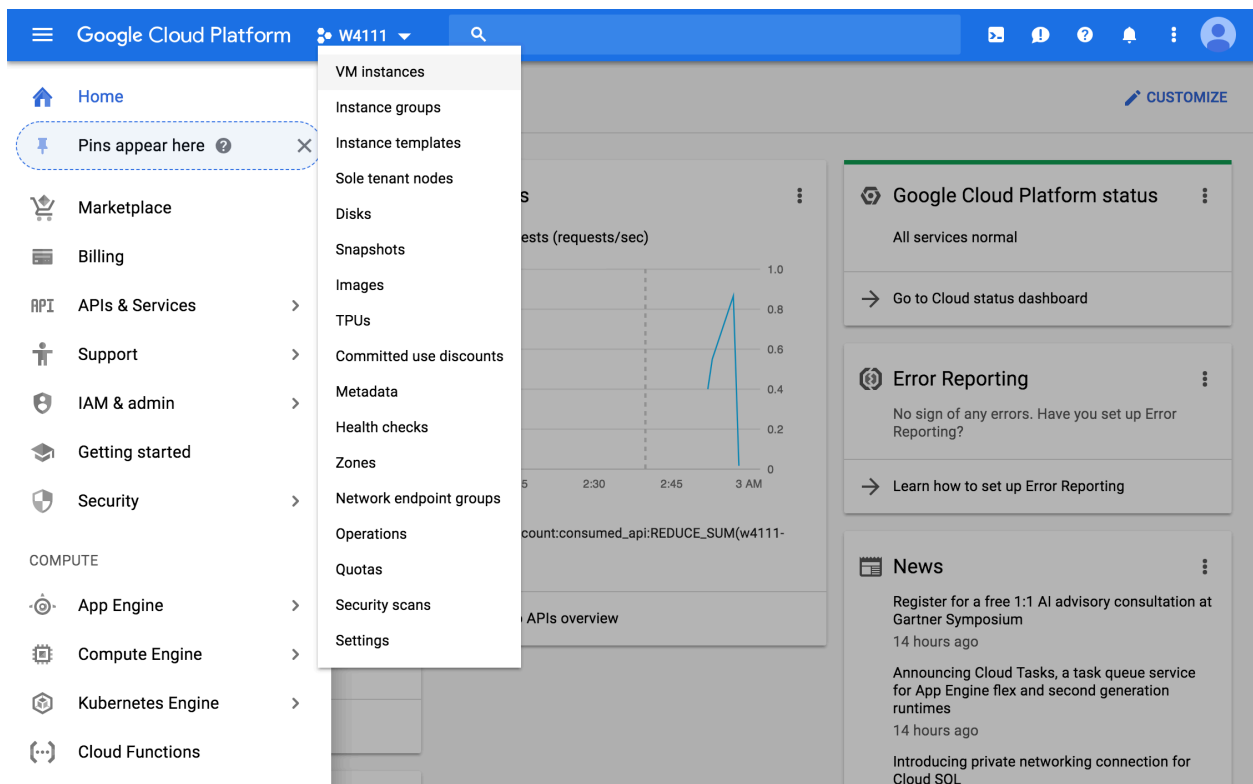
Name your project W4111, and click CREATE. Wait a few minutes while your project is being created.

Then, head back to <https://console.cloud.google.com>.

First, make sure that the project W4111 (that you just created) is selected on the navigation bar, like the image below. If not click on the arrow right next to it, and select W4111 as your project.

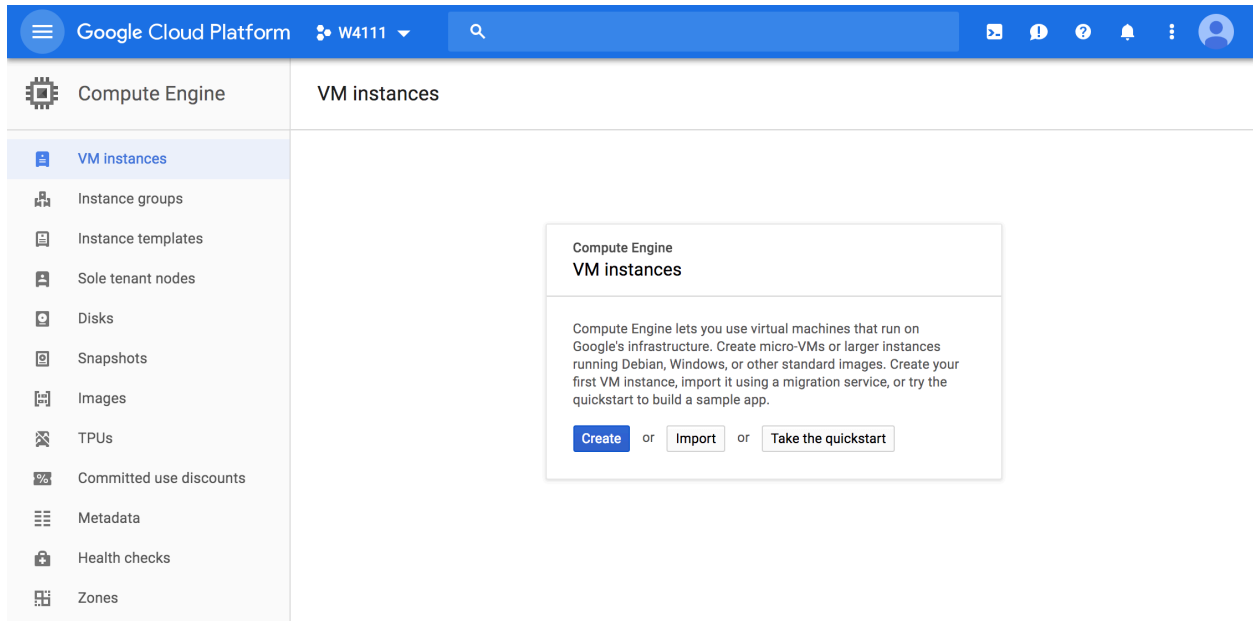


Click on the navigation menu (the icon on the upper left corner), and then select Compute Engine > VM instances.

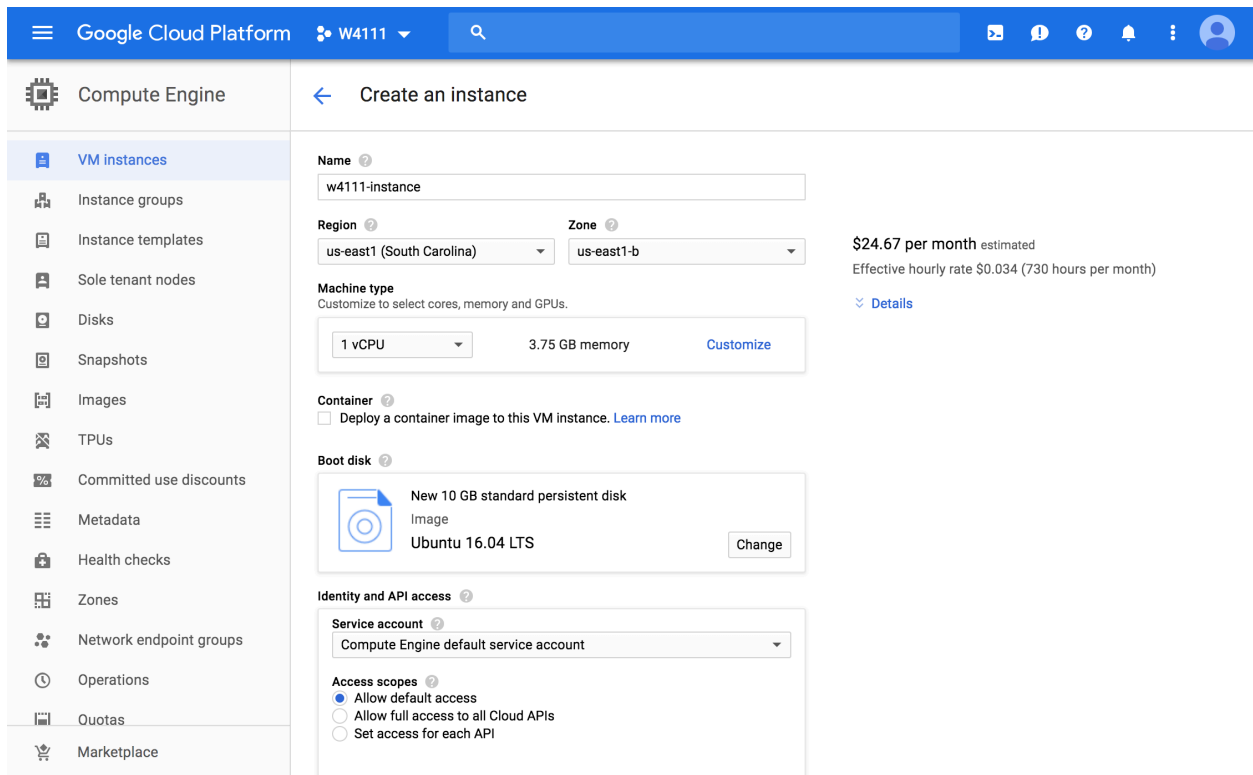


Now, let's create your instance! Roughly speaking, an instance is a computer that runs on the cloud.

Click on "Create"

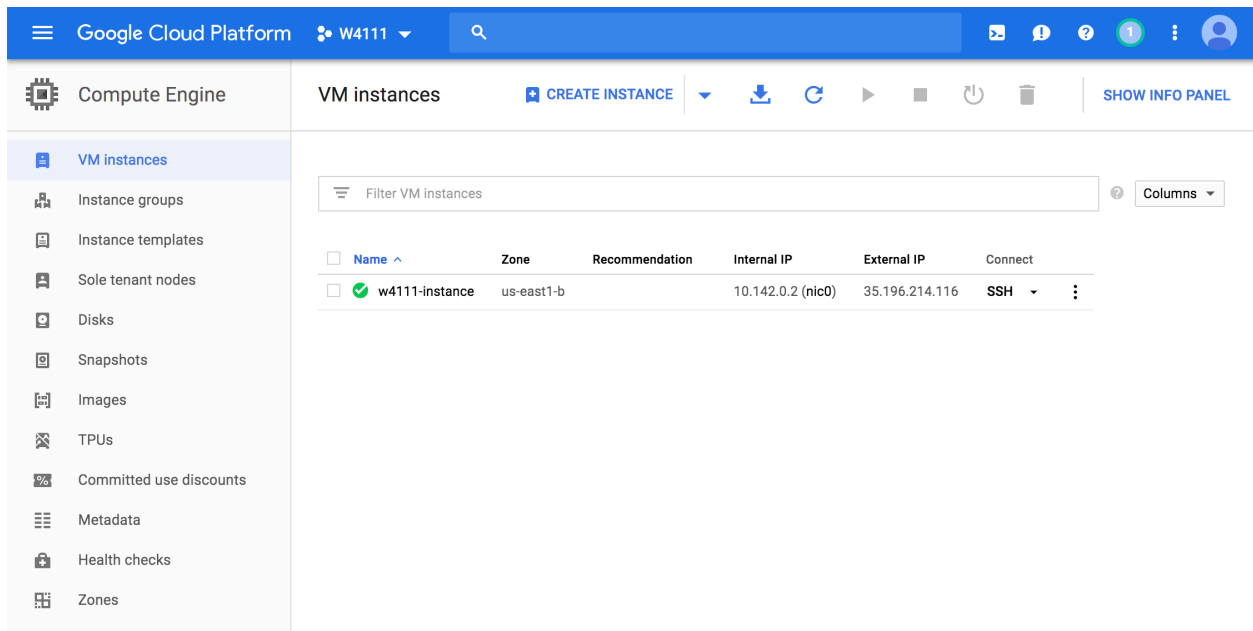


Name your instance as w4111-instance. Also, under Boot Disk, click change and select "Ubuntu 16.04 LTS". Your options should look like the ones below.



Scroll down and click Create.

Wait until the green checkmark shows up, like below:



Google Cloud Platform W4111

Compute Engine VM instances

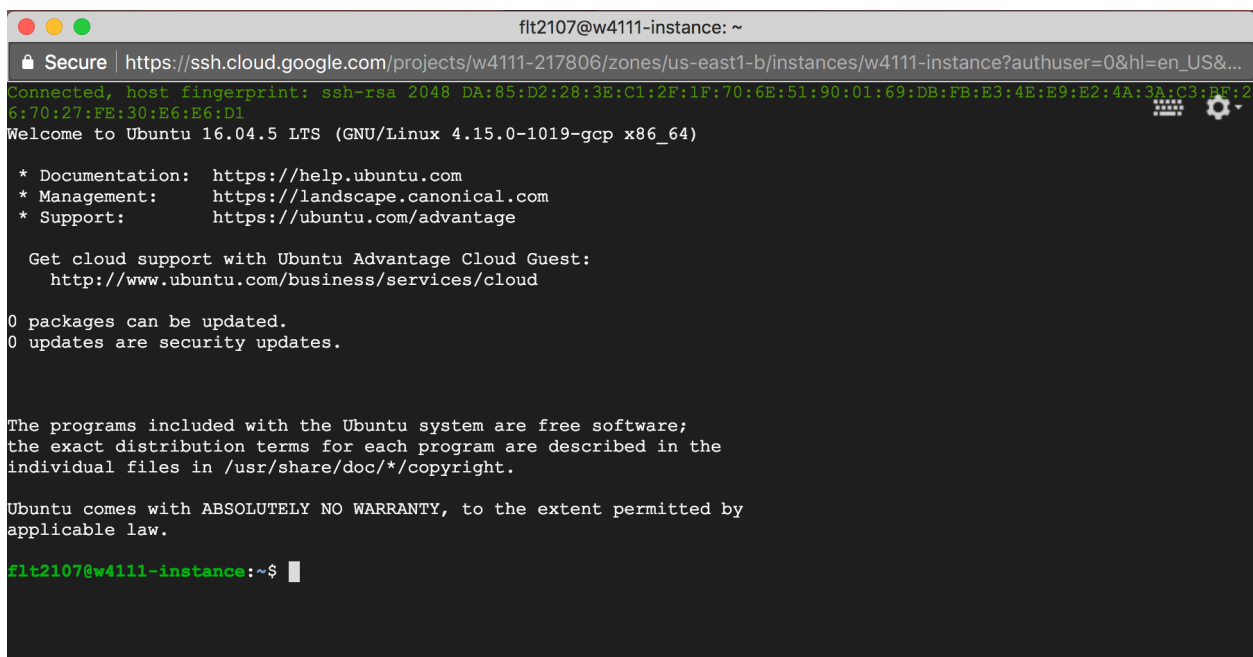
CREATE INSTANCE

Filter VM instances

Name	Zone	Recommendation	Internal IP	External IP	Connect
<input checked="" type="checkbox"/> w4111-instance	us-east1-b		10.142.0.2 (nic0)	35.196.214.116	SSH

Note: External IP is the address to access your instance. You will use it for Part3 to access your web application. It changes every time that the instance is restarted, so don't bother writing it down.

Now click SSH. This will open a terminal window and connect to your instance.



```
ftl2107@w4111-instance: ~  
Secure | https://ssh.cloud.google.com/projects/w4111-217806/zones/us-east1-b/instances/w4111-instance?authuser=0&hl=en_US&...  
Connected, host fingerprint: ssh-rsa 2048 DA:85:D2:28:3E:C1:2F:1F:70:6E:51:90:01:69:DB:FB:E3:4E:E9:E2:4A:3A:C3:FE:26:70:27:FE:30:E6:E6:D1  
Welcome to Ubuntu 16.04.5 LTS (GNU/Linux 4.15.0-1019-gcp x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
Get cloud support with Ubuntu Advantage Cloud Guest:  
http://www.ubuntu.com/business/services/cloud  
  
0 packages can be updated.  
0 updates are security updates.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
ftl2107@w4111-instance:~$
```

Type the following command into the terminal window and then hit enter

```
sudo apt-get update; sudo apt-get -y install postgresql postgresql-client postgresql-contrib
```

Wait for it to complete.

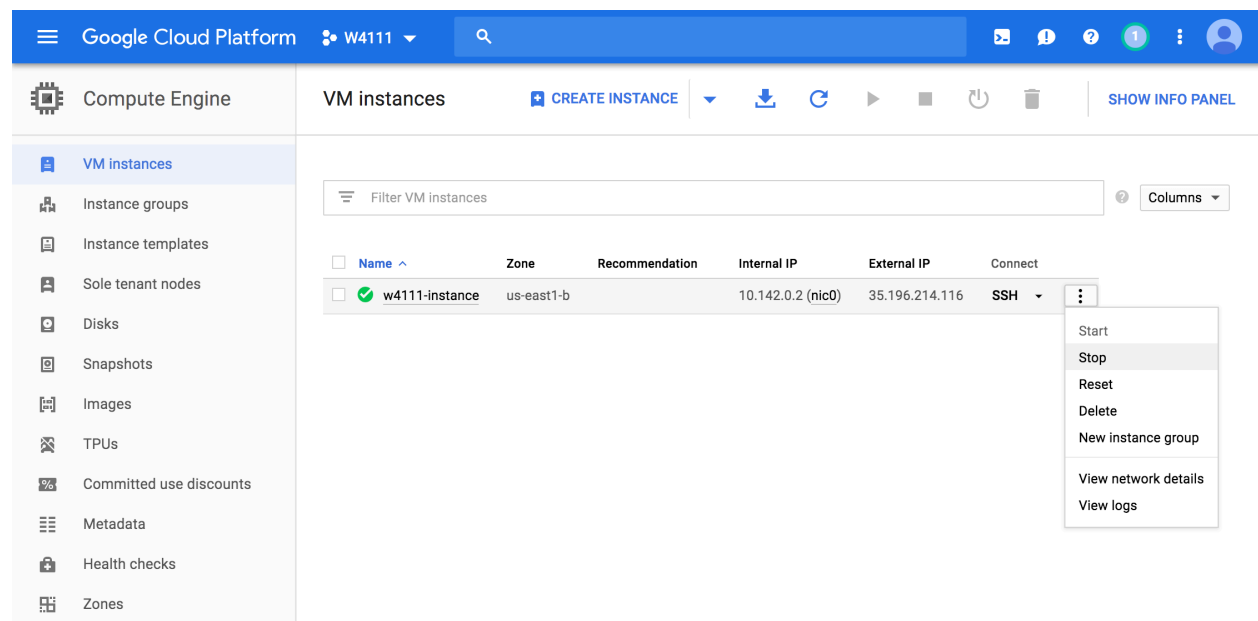
You have installed the postgres client! You can now use the psql command to connect to the class database server (see Part2 instructions).

Remember to shut down your instance whenever you are not using it. Otherwise, it will consume all your credits and we can't get you a new coupon! See instructions below.

Steps to shut down your instance

If you have an open SSH window, you can simply close it. Go back to the Compute Engine console.

Click on the three dots icon corresponding to you instance, then click Stop, like the iamge below.



If a message shows up, just confirm it by clicking Stop.

To restart your instance, just follow the same procedure, but clicking on Start instead.