

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

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



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

≡ Google	Cloud Platform Select a project 👻	۹		2. 9	9 9	¢	
				N			
1 .	Select from NO ORGANIZATION -		N	EW PROJECT	:		
	Search projects and folders						
	RECENT ALL						
	Name		ID				
	cloud.cs.columbia.edu		1032053308732				
	ecbm4040-tas-dl		dltest-167717				
				GANGEL			
				CANCEL	UPEN		
	Goog	le APIs	Documenta	ation		20/	

Click on "NEW PROJECT".

≡ Google Cloud Platform ९	
New Project	
Project Name * W4111	Ø
Project ID: w4111-217806. It cannot be changed later. EDIT	
Organization	
cloud.cs.columbia.edu	0
This project will be attached to cloud.cs.columbia.edu.	
Location *	
🔠 cloud.cs.columbia.edu	BROWSE
Parent organization or folder	
CREATE CANCEL	

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.

\equiv Google Cloud Platform	🕽 W4111 👻	۹		2 0 0 • : Q
DASHBOARD ACTIVITY				CUSTOMIZE
Project info Project name W4111	:	API APIs Requests (requests/sec)	:	 Google Cloud Platform status All services normal
Project ID w4111-217806 Project number			3	ightarrow Go to Cloud status dashboard
648548064486 → Go to project settings		0.	5	(i) Error Reporting : No sign of any errors. Have you set up Error Reporting?
Resources	:	2:15 2:30 2:45	3	ightarrow Learn how to set up Error Reporting
This proiect has no resources		api/request_count:consumed_api:REDUCE_SUM(w4111	-	

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

≡	Google Cloud Platform	ા w4111 👻 વ	2 9 9 + : 🔾
		VM instances	
A	Home	Instance groups	CUSTOMIZE
(#	Pins appear here 🔞	Instance templates	
\		Sole tenant nodes	Coccele Claud Platform status
<u>ک</u>	Marketplace	Disks	
	Billing	Snapshots	ests (requests/sec) All services normal
		Images	1.0
HPI	APIs & Services >	TPUs	
Ť	Support >	Committed use discounts	0.6
A	IAM & admin >	Metadata	0.4 Error Reporting
^v		Health checks	0.2 No sign of any errors. Have you set up Error Reporting?
۲	Getting started	Zones	0
•	Security >	Network endpoint groups	5 2:30 2:45 3 AM → Learn how to set up Error Reporting
		Operations	count:consumed_api:REDUCE_SUM(w4111-
COM	PUTE	Quotas	🖬 News 🗄
۰Ô۰	App Engine >	Security scans	APIs overview Gartner Symposium
÷	Compute Engine	Settings	14 hours ago
- <u>-</u>			Announcing Cloud Tasks, a task queue service for Ann Engine flex and second generation
٢	Kubernetes Engine >		runtimes
()	Cloud Functions		14 nours ago
. /			Cloud SOL

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

Click on "Create"

	Google Cloud Platform	\$• W4111 →	۹												>-	ø	?)		:	
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A	VM instances																				
6 1 4	Instance groups																				
	Instance templates			Com	pute En	gine															
8	Sole tenant nodes			VM	instar	nces															
0	Disks			Com	pute En	gine let	ts you	use v	virtual	l mac	hines	that r	ın on								
0	Snapshots			Goog runni	gle's infr ing Debi	ian, Wir	ture. Ci ndows,	reate , or of	e micr ther s	ro-VM stand	ls or la ard im	ages.	rstanc Create	es your							
	Images			quick	kstart to	build a	a samp	ple ap	pp.	inigia		ervice	ortry	uie							
8	TPUs			Crea	eate o	or Im	nport	or	Ta	ke th	e quic	kstart									
1%1	Committed use discounts																				
II	Metadata																				
Ô	Health checks																				
	Zones																				

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.

	Google Cloud Platform	\$• W4111 → Q 🗖 😰 😰 🌲 🗄 📿
۲	Compute Engine	Create an instance
B	VM instances	Name 📀
ana Ana	Instance groups	w4111-instance
	Instance templates	Region Zone Zone S24.67 per month estimated
8	Sole tenant nodes	Us-east i (South Carolina)
	Disks	Machine type Customize to select cores, memory and GPUs. Vertails
		1 vCPU - 3.75 GB memory Customize
2	Snapshots	
	Images	Container @ Deploy a container image to this VM instance. Learn more
×	TPUs	
1%)	Committed use discounts	DUU UISK
==	Metadata	Image
a	Health checks	Ubuntu 16.04 LTS Change
	Zones	Identity and API access 🕖
	Network endpoint groups	Service account 🕡
0	Operations	
	Quetes	Allow default access Allow full access to all Cloud APIs
1=1 \\$/	Vuotas	Set access for each API
¥:	магкетріасе	

Scroll down and click Create.

Wait until the green checkmark shows up, like below:

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۲	Compute Engine	VM instances	CREATE INSTANCE	•	₹ C	▶ ■	1 ن		SHOW INFO	PANEL
A	VM instances									
品	Instance groups	= Filter VM instances							Colum	ins 💌
	Instance templates	Name o	Zona Pecommandation	Int	ternal IP	External ID	Connect			
8	Sole tenant nodes	w4111-instance	us-east1-b	10	0.142.0.2 (nic0)	35.196.214.116	SSH -	:		
0	Disks									
0	Snapshots									
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98	Zones									

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.



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.

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A	VM instances			
晶	Instance groups	= Filter VM instances		Columns 👻
	Instance templates			
A	Sole tenant nodes	Name ∧ Zone Recommendation Internal IP External IP Conr Sw4111-instance us-east1-b 10.142.0.2 (nic0) 35.196.214.116 SSP		:
0	Disks			Start
0	Snapshots			Stop
	Images			Reset Delete
X	TPUs			New instance group
1%1	Committed use discounts			View network details
==	Metadata			View logs
â	Health checks			
	Zones			

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.