

## ED 200: Google Cloud Linux Server (15 pts)

### What you need

- Any computer with a Web browser.
- A credit card (you won't be charged any money)

### Purpose

To deploy a Linux Server on the Google cloud.

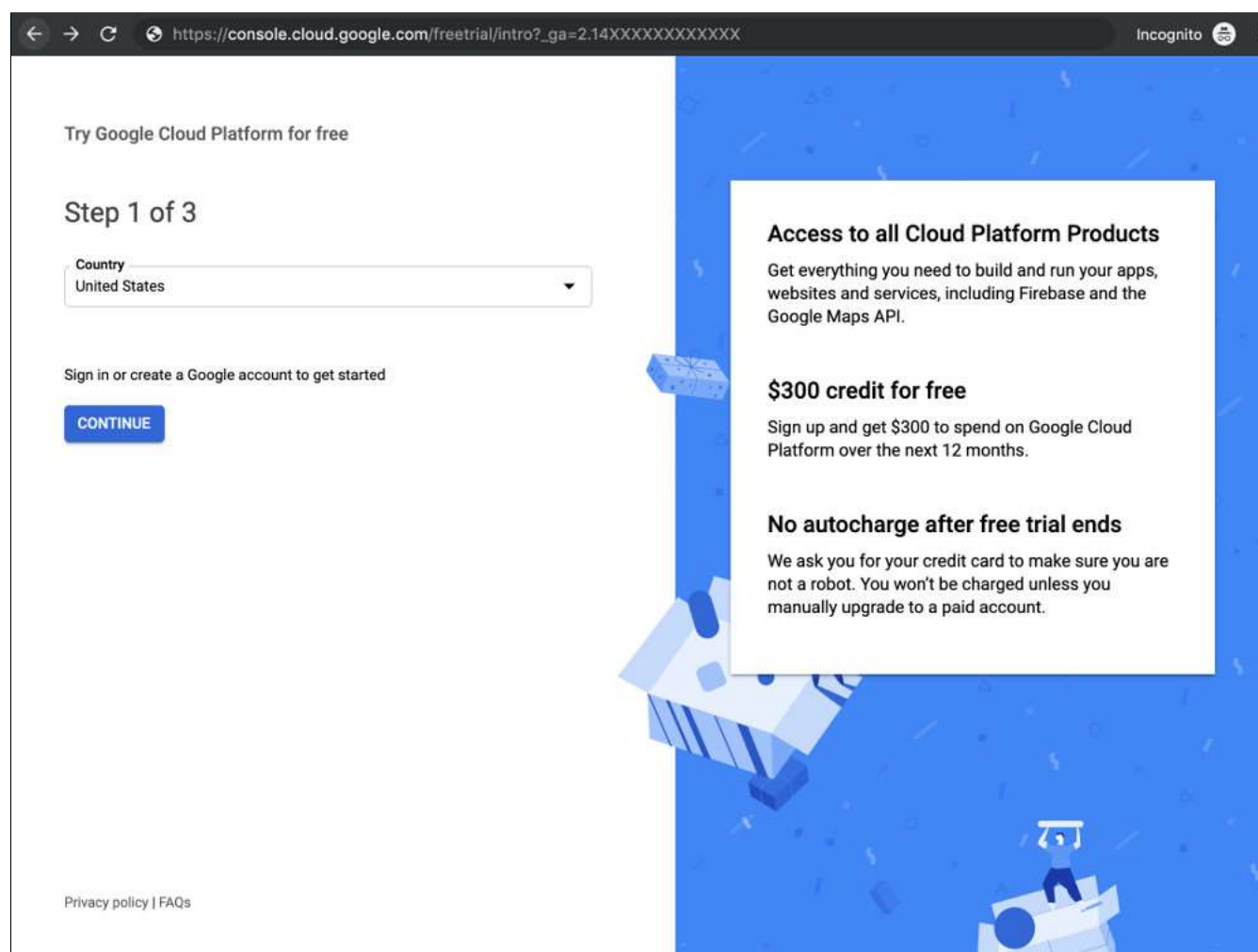
## Creating an Account

Start at

<https://cloud.google.com/free/>

Click "Get started for free"

On the next page, choose your country and click continue.



The screenshot shows the Google Cloud Platform 'Try for free' sign-up page. The browser address bar displays 'https://console.cloud.google.com/freetrial/intro?\_ga=2.14XXXXXXXXXXXX'. The page is titled 'Try Google Cloud Platform for free' and is 'Step 1 of 3'. It features a 'Country' dropdown menu set to 'United States' and a 'CONTINUE' button. A sidebar on the right highlights 'Access to all Cloud Platform Products', '\$300 credit for free', and 'No autocharge after free trial ends'. The background has a blue theme with floating server icons and a person icon at the bottom right.

Try Google Cloud Platform for free

Step 1 of 3

Country  
United States

Sign in or create a Google account to get started

CONTINUE

Access to all Cloud Platform Products

Get everything you need to build and run your apps, websites and services, including Firebase and the Google Maps API.

**\$300 credit for free**

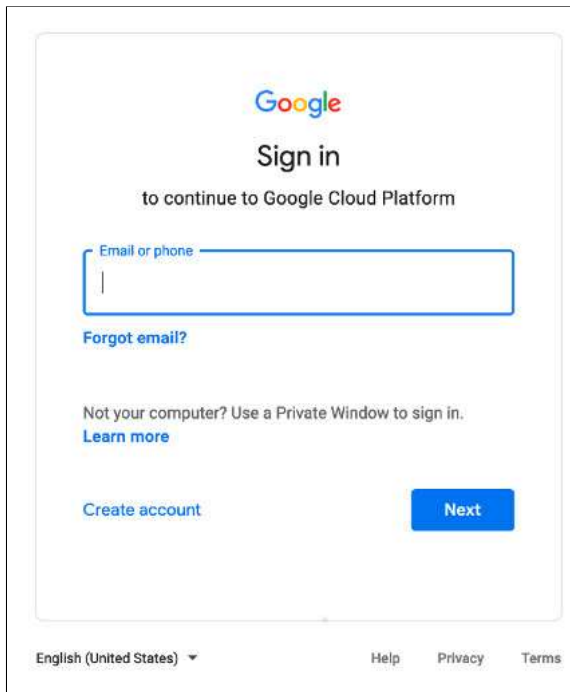
Sign up and get \$300 to spend on Google Cloud Platform over the next 12 months.

**No autocharge after free trial ends**

We ask you for your credit card to make sure you are not a robot. You won't be charged unless you manually upgrade to a paid account.

Privacy policy | FAQs

Sign in to a Google account (don't use a CCSF email account):



Google

## Sign in

to continue to Google Cloud Platform

Email or phone

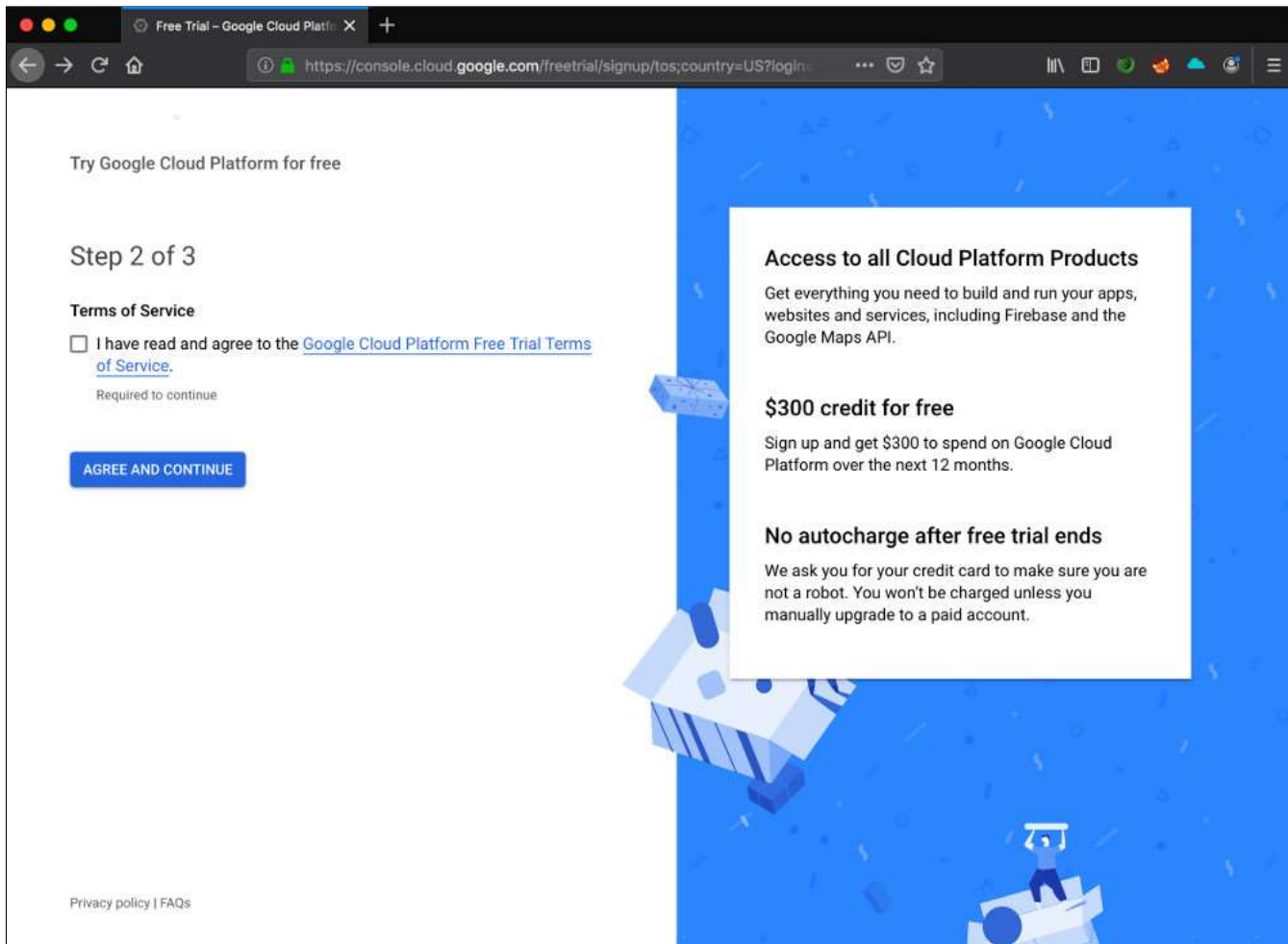
Forgot email?

Not your computer? Use a Private Window to sign in.  
[Learn more](#)

[Create account](#) [Next](#)

English (United States) Help Privacy Terms

Agree to the Terms of Service.



Free Trial - Google Cloud Plat

https://console.cloud.google.com/freetrial/signup/tos;country=US?login=

### Try Google Cloud Platform for free

## Step 2 of 3

#### Terms of Service

☐ I have read and agree to the [Google Cloud Platform Free Trial Terms of Service](#).

Required to continue

[AGREE AND CONTINUE](#)

Privacy policy | FAQs

#### Access to all Cloud Platform Products

Get everything you need to build and run your apps, websites and services, including Firebase and the Google Maps API.

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Fill in the next page. You must enter a credit card number, but it says you won't be charged without agreeing to that later.

Try Google Cloud Platform for free

Step 3 of 3

Customer info

Account type ⓘ

Business

Name and address ⓘ

Business name

Name

Address line 1

Address line 2

City

State ZIP code ⓘ

**Access to all Cloud Platform Products**

Get everything you need to build and run your apps, websites and services, including Firebase and the Google Maps API.

**\$300 credit for free**

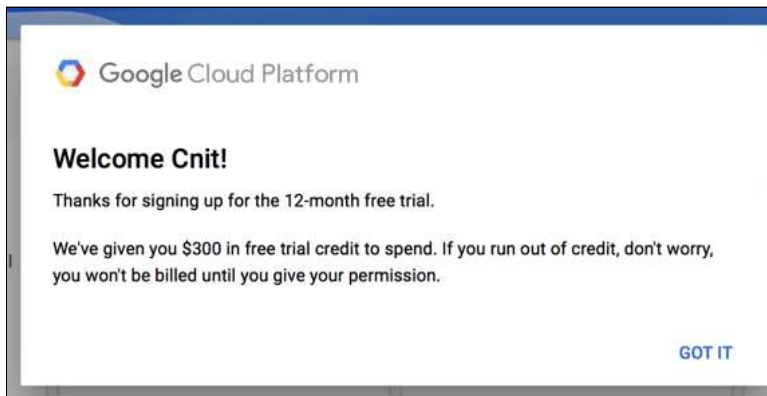
Sign up and get \$300 to spend on Google Cloud Platform over the next 12 months.

**No autocharge after free trial ends**

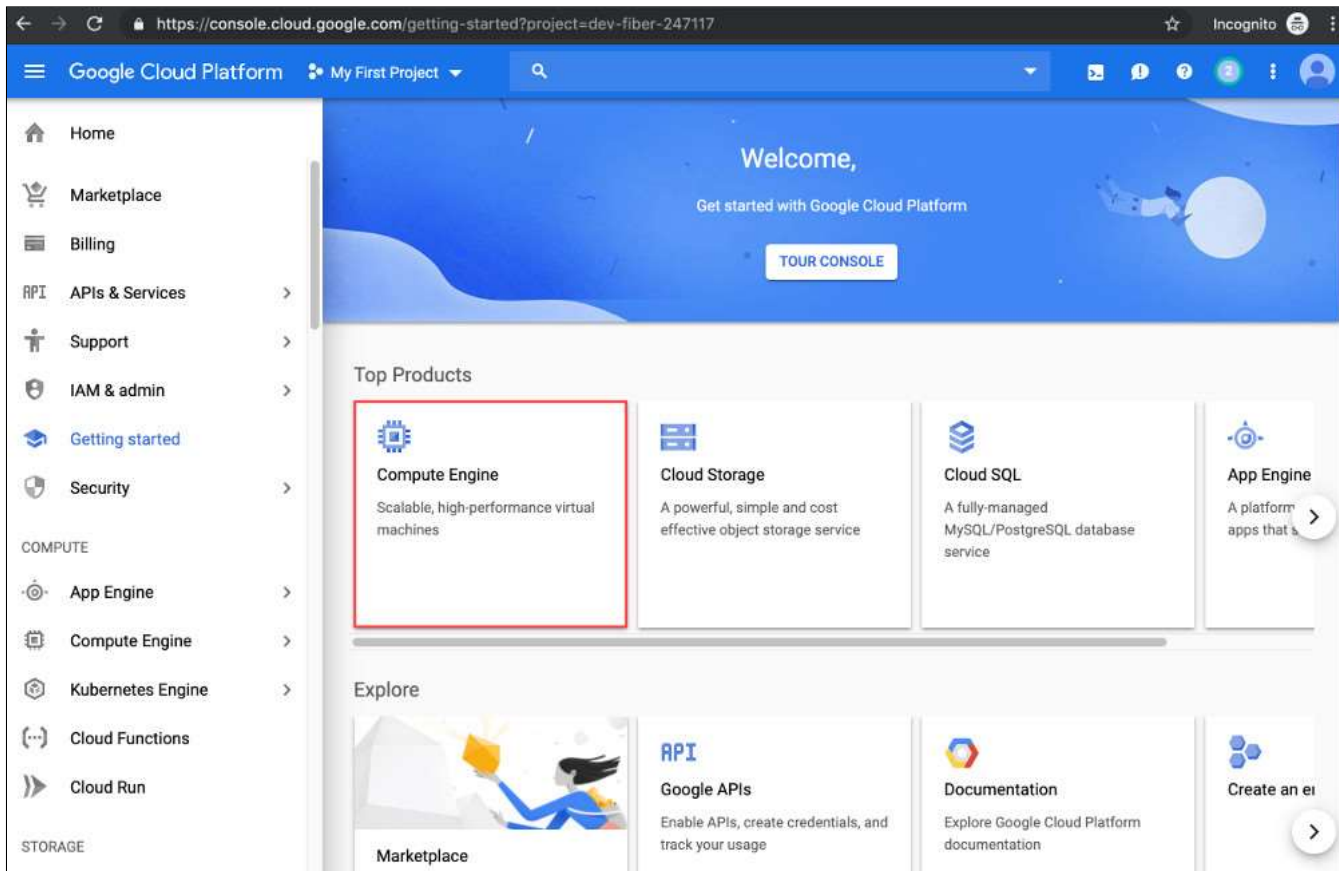
We ask you for your credit card to make sure you are not a robot. You won't be charged unless you manually upgrade to a paid account.

Click **"START MY FREE TRIAL"**

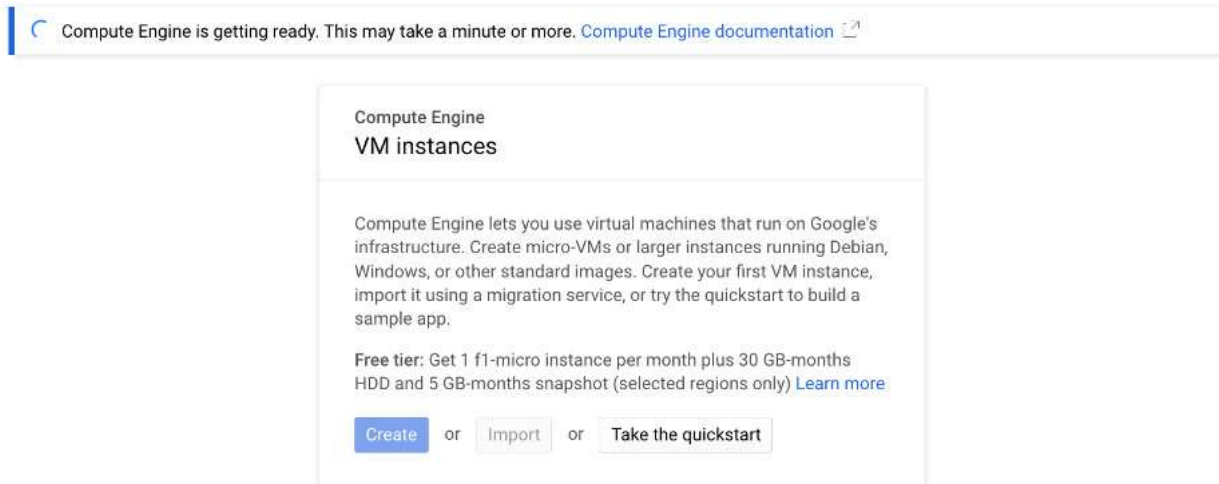
A box says you have \$300 in free trial credit, as shown below.



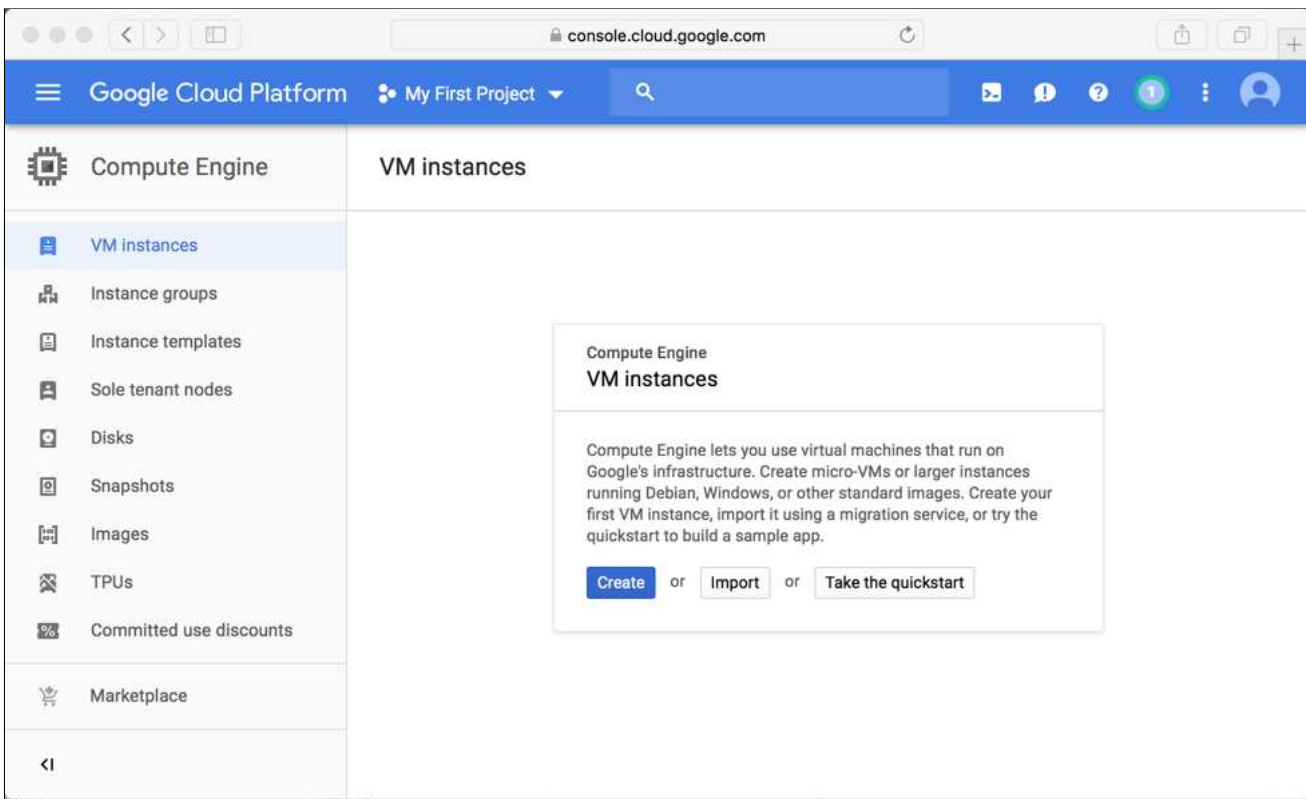
On the next page, click **"Compute Engine"**.



Wait while it gets ready.



The "VM instances" page appears, as shown below. When it's ready, you see the screen shown below. Click **Create**.

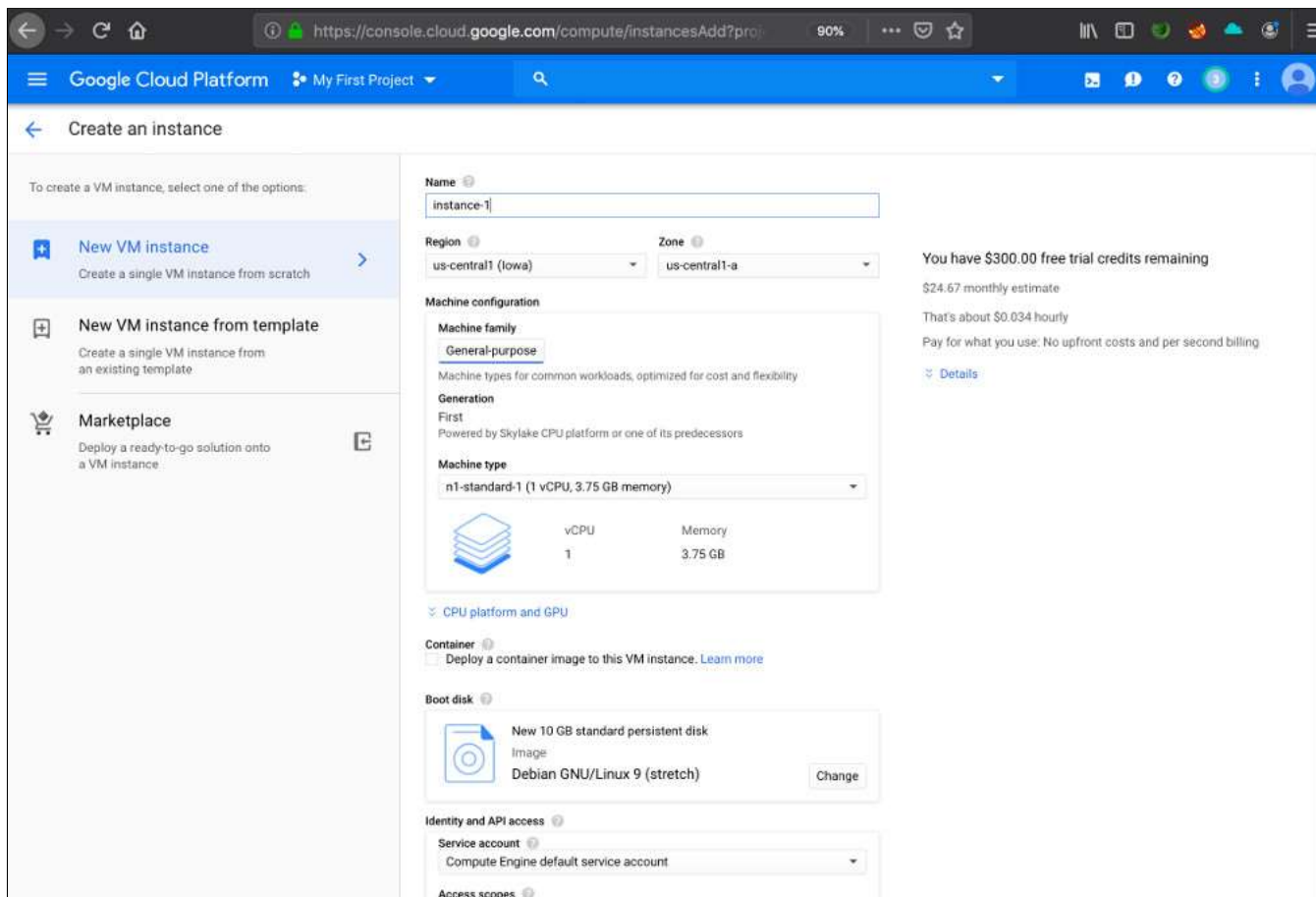


## Creating a Debian Linux Server

The "Create an instance" page appears as shown below.

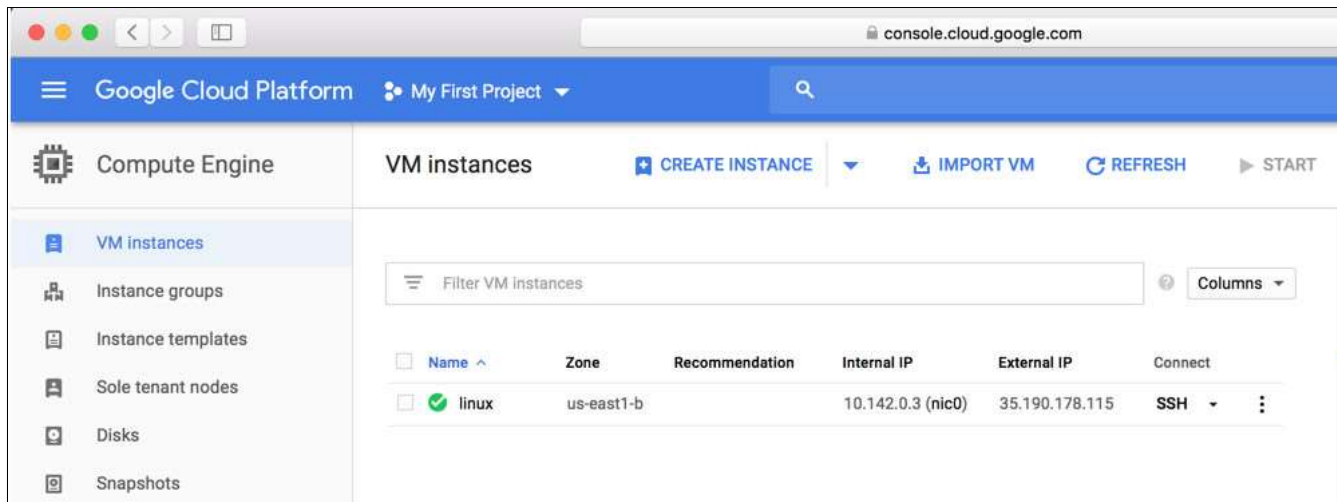
Give your instance an appropriate name, such as "linux".

In the "Create an instance" page, accept the default selections for the other options, as shown below.

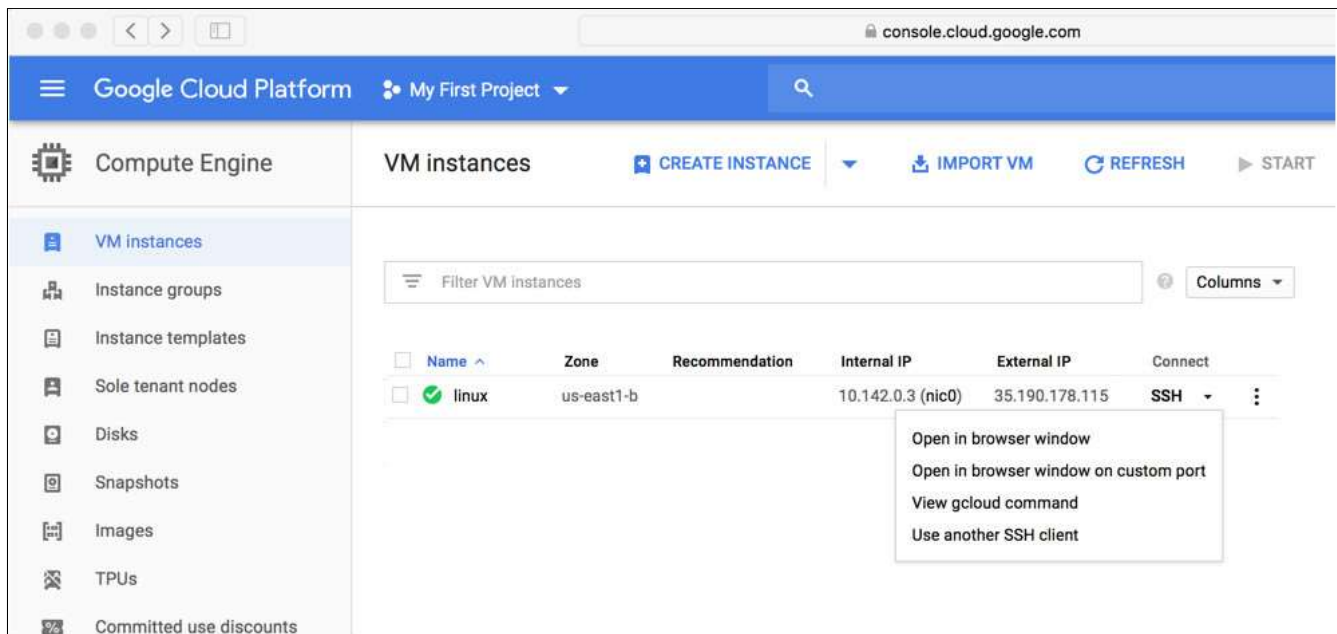


At the bottom of the page, click the **Create** button.

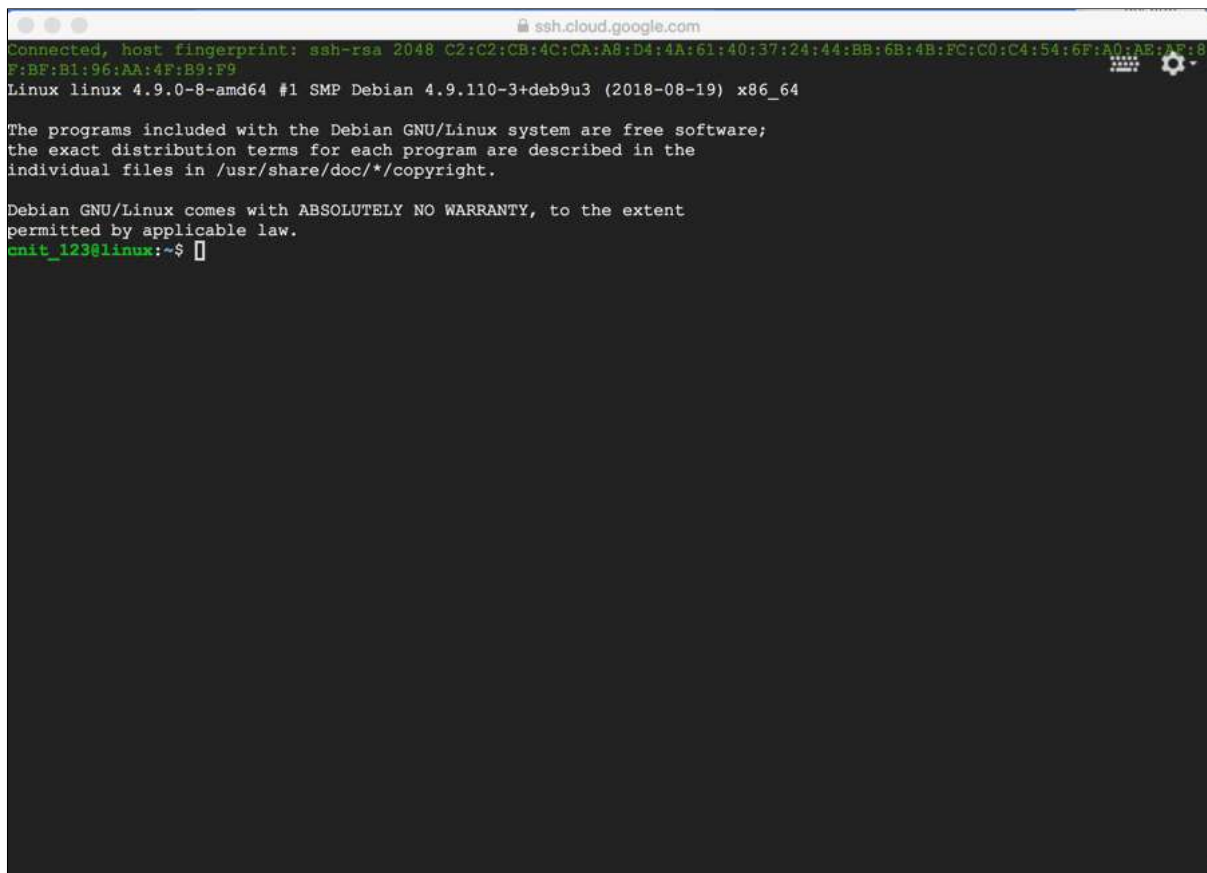
Your Linux machine is now included in the list of instances, as shown below.



In the "linux" line, in the "Connect" column, click the drop-down arrow. Click **Open in browser window**, as shown below.



Your Linux server's console appears, as shown below.



```
ssh.cloud.google.com
Connected, host fingerprint: ssh-rsa 2048 C2:C2:CB:4C:CA:A8:D4:4A:61:40:37:24:44:BB:6B:4B:FC:C0:C4:54:6F:A0:AE:AF:8
F:BF:B1:96:AA:4F:B9:F9
Linux linux 4.9.0-8-amd64 #1 SMP Debian 4.9.110-3+deb9u3 (2018-08-19) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
cnit_123@linux:~$
```

## ED 200.1: Model (15 pts)

In the console, execute these commands, as shown below.

```
sudo apt update
sudo apt install hwnfo -y
sudo hwnfo --disk
```

Find the Model name, which is covered by a green box in the image below. That's the flag.



```
cnit_123@linux2:~$ sudo apt install hwinfo -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
hwinfo is already the newest version (21.38-1).
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
cnit_123@linux2:~$ sudo hwinfo --disk
09: SCSI 01.0: 10600 Disk
[Created at block.245]
Unique ID: R7kM.empSTHgeyZC
Parent ID: UH3v.4Ex5C38ZXm7
SysFS ID: /class/block/sda
SysFS BusID: 0:0:1:0
SysFS Device Link: /devices/pci0000:00/0000:00:03.0/virtio0/host0/target0:0:1/0:0:1:0
Hardware Class: disk
Model: 
Vendor: "Google"
Device: "PersistentDisk"
Revision: "1"
Driver: "virtio_scsi", "sd"
Driver Modules: "virtio_scsi", "sd_mod"
Device File: /dev/sda (/dev/sg0)
Device Files: /dev/sda, /dev/disk/by-id/google-linux2, /dev/disk/by-id/scsi-0Google_PersistentDisk_linux2, /dev/
disk/by-path/pci-0000:00:03.0-scsi-0:0:1:0
Device Number: block 8:0-8:15 (char 21:0)
BIOS id: 0x80
Geometry (Logical): CHS 10240/64/32
Size: 20971520 sectors a 512 bytes
Capacity: 10 GB (10737418240 bytes)
Config Status: cfg=new, avail=yes, need=no, active=unknown
Attached to: #8 (Unclassified device)
cnit_123@linux2:~$
```

Ported to new scoring engine 7-17-19

Note to avoid CCSF email account added 8-19-19