Dear Students,

Here is the URL you will need to access in order to request a Google Cloud Platform coupon. You will be asked to provide your school email address and name. An email will be sent to you to confirm these details before a coupon is sent to you.

Student Coupon Retrieval Link

- You will be asked for a name and email address, which needs to match the domain. A confirmation email will be sent to you with a coupon code.
- You can request a coupon from the URL and redeem it until: 12/24/2017
- Coupon valid through: 8/24/2018
- You can only request ONE code per unique email address.

Once you get the code in email DO NOT click on “Click [here] to redeem”

- Go to the https://console.cloud.google.com/education?code= link.
- Make sure you are signed in to your GMAIL account.
- Enter the Google Cloud Platform Coupon code you got in the email and follow the instructions on the page.
- Once the coupon is applied, you can see in the Billing panel your 50$ credit.

Create a virtual machine instance

This page: https://cloud.google.com/compute/docs/instances/create-start-instance describes various ways that you can create a VM instance on Google Cloud Platform. Below is a simpler version of these instructions that would suffice for this course.

1. In the Cloud Platform Console, go to the VM instances page. (If the Project is not created create the Project and then create instance under the newly created project)
2. Click the **Create instance** button.
3. In the **Machine type** section, select **1 vCPU** in the drop-down list. Click “Customize” and reduce the memory size from 3.75 GB to **2 GB**.
   Why reduce the memory? You might notice that the cost of using your VM per hour is shown in the top right of the console. More VCPUs and memory cost more money. You don’t want to exhaust your GCP credits before the end of the semester.
4. In the **Boot disk** section, click **Change** to begin configuring your boot disk.

5. In the **OS images** tab, choose **the UBUNTU 16.04 LTS image** and click **Select.**

    1. In the beginning, DON'T select images with large disk sizes. It will cost you more and you'll exhaust your GCP credits before the semester ends. But if you need large disk sizes for your project, you can select as needed.
    2. Select only Ubuntu image for this course. That way, the TAs can help you with the configuration if you need help. With other Linux images, they may or may not be able to help you.

6. Click the **Create** button to create the instance of your VM.

Remotely connect to your instance

This page: https://cloud.google.com/compute/docs/instances/connecting-to-instance describes three ways to connect remotely to your VM instance -- using a browser, using gcloud command line tool, and using ssh. We strongly suggest using either gcloud or ssh commands. That way you will learn a few more tricks and gain a deeper understanding of how public-private keys are used for ssh.

Clean up after you are done

To avoid unnecessary charges to your Google Cloud Platform account, always **STOP** your VM after you finish your work.

This page:

https://cloud.google.com/compute/docs/instances/stopping-or-deleting-an-instance

explains how to STOP your VM instance.

1. In the Cloud Platform Console, go to the VM instances page.
2. Click the name of the instance you created.
3. At the top of the instance's details page, click **STOP.**
   Alternatively, you can also shut-down your VM normally from within the SSH terminal using the command

   $ sudo halt

When you want to reuse your VM, come back to the VM instances page, select the instance you created earlier, and click **START.**