**Prerequisite for Experiments**

1) Creating a Free Account: Visit <https://cloud.google.com/free>

2) Click on Get started for free

3) Sign in with Gmail Id Select Country as India-> Agree and Continue

4) Click on create new payment profile and fill the details

Profile type: Individual

Legal name: YourName

Street Address: KIA

City: Bengaluru

Pincode: 562157

Click on Create

5) After Filling the above details, Click on Payment Method:

6) Click on pay by UPI or QR code and Click on start free

7) Scan the QR code thorough any of the GPay, PhonePay , Pay-TMetc

8) Fill the following details:

1. Best describes

Other

learning

1. What brought you to Google Cloud

Learn more/explore

1. What are you interested in doing

Websites

1. What best describes your role

Other

Education

Click on Done

9) Account will be created and will be landing at Google Cloud Console. It is ready to use the free account for 90 days and 26163 INR is given for free by google to explore the resources.

10) Go to Cloud Overview -> Dashboard

Experiment: 1

Creating a Virtual Machine: Configure and deploy a virtual machine with specific CPU and memory requirements in Google Cloud.

1. Click in search bar and type Compute Engine or select Compute Engine
2. Enable API
3. Click on create Instance
4. Give the name for VM instance-> specified as vm1(can be any name typed in lower case letters)

Select the region->US Central(low) is selected,

any region can be selected and any zone can be selected from that region.

Depending on the cost and locality selection can be made for deploying virtual machine. Configure the virtual machine based on vCPUs and Memory needed-> E2 series is selected currently which is low cost and used for day to day computing. Any virtual machines configuration can be selected based on the requirement.

1. Click on machine Type-> Select the required machine type Shared-core e2-microis selected since it costs less.
2. Keep advanced configurations default. Check the cost estimate on right side of the panel which will indicate the monthly cost for running the Virtual Machine of defined configuration.
3. Click on create and wait for the vm to be created
4. Connecting to Virtual Machine: Click on vm1
5. Click on SSH and select “open in browser window”
6. Click on Authorize
7. Virtual Machine named vm1 with linux operating system is available for access
8. Execute some basic linux commands.
9. Close the window and back to virtual machine instance. click on more option specified with three dots click on delete(to delete theinstance).
10. Click on “delete” and check in the notification for complete deletion

EXPERIMENT-2

Getting Started with Cloud Shell and gcloud: Discover the use of gcloudcommands to manage Google Cloud resources from Cloud Shell.

1. Click on Cloud Shell, Cloud Shell will be enabled.
2. gcloud auth list
3. gcloud config list project
4. Run the following command to set the project region for this lab: gcloud config set compute/region REGION
5. To create a variable for region, run the following command: export REGION=REGION Run the following command to create a variable for the zone: export ZONE=Zone
6. Create VM Instance by using following commands: gcloud compute instances create gcelab2 --machine-type e2-medium--zone=us- central1-a
7. Check GCloud Console for newly created VM instance named gcelab2
8. Delete the instance: gcloud compute instances delete gcelab2 \

--keep-disks=all \

--zone=us-central1-a or directly by cloud console: Click on delete.