**User addition in Project :**

gcloud projects add-iam-policy-binding shivaamacadmey --member=rahul.chavan382@gmail.com --role='roles/editors'

**Servie account details and creation :**

gcloud iam service-accounts list

gcloud iam service-accounts create test-123 --description="TEST" --display-name=TEST-123

gcloud iam service-accounts add-iam-policy-binding test-123--member=MEMBER --role=ROLE

**create a auth-key using IAM service account : ( Not sure where to download)**

gcloud iam service-accounts keys create OUTPUT-FILE --iam-account=owner-595@shivaamiacadmey.iam.gserviceaccount.com

**login using CLI :**

gcloud auth activate-service-account --key-file="filepath/filename"

**connect to project :**

gcloud config set project shivaamiacademy

**Create a network :**

gcloud compute networks create anuj-cli-vpc-final --bgp-routing-mode=regional --subnet-mode=CUSTOM

gcloud compute networks list

**Create subnets:**

gcloud compute networks subnets create anuj-private --network=anuj-cli-vpc-final --range=192.168.3.0/28 --region=asia-east1

gcloud compute networks subnets create anuj-public --network=anuj-cli-vpc-final --range=192.168.3.16/28 --region=asia-east1

gcloud compute networks subnets list

**Add firewall rule : (Another rule need to add for ssh ..if not you canont acces sever using ssh)**

gcloud compute firewall-rules create private --network rahul-vpc1 --allow tcp,udp,icmp --source-ranges 192.168.0.32/28

**Firewall rules for all access:**

gcloud compute firewall-rules create all --network anuj-cli-vpc-final --allow=all --source-ranges=0.0.0.0/0

**To create Instance**

gcloud compute instances create anuj-test-standvm-1 --boot-disk-size=10g --hostname=anujtestVM.shivaamiacadmey.com --zone=asia-east1-a --network=anuj-cli-vpc-final --subnet=anuj-public --image-family=ubuntu-1604-lts --image-project=ubuntu-os-cloud

WARNING: You have selected a disk size of under [200GB]. This may result in poor I/O performance. For more information, see: https://developers.google.com/compute/docs/disks#performance.

Created [https://www.googleapis.com/compute/v1/projects/shivaamiacadmey/zones/asia-east1-a/instances/anuj-test-standvm-1].

NAME ZONE MACHINE\_TYPE PREEMPTIBLE INTERNAL\_IP EXTERNAL\_IP STATUS

anuj-test-standvm-1 asia-east1-a n1-standard-1 192.168.3.18 35.194.249.163 RUNNING

*\*image and image-family we cannot use simultaneously .*

**To stop instance**

gcloud compute instances stop anuj-test-standvm-1

gcloud compute instances start anuj-test-standvm-1

sudo apt-get update

sudo apt-get install apache2

**rahul\_chavan382@standVM**:**~**$ sudo ufw app list

Available applications: Apache

Apache Full

Apache Secure

OpenSSH

**rahul\_chavan382@standVM**:**~**$ sudo ufw allow 'Apache Full'

Rules updated

Rules updated (v6)**r**

**ahul\_chavan382@standVM**:**~**$ sudo ufw status

<https://cloud.google.com/sdk/gcloud/reference/beta/ai-platform/explain>

Tempate creation

gcloud compute instance-templates create anuj-test-instance --boot-disk-size=10g --network=anuj-cli-vpc-final --subnet anuj-public --image-family=ubuntu-1604-lts --image-project=ubuntu-os-cloud -–region=asia-east1

**Instance group**:

gcloud compute instance-groups managed create anuj-test-instance-group --template="anuj-test-instance" --size=1 --region=asia-east1 --zones=asia-east1-b --instance-redistribution-type=proactive

gcloud compute instance-groups managed delete anuj-test-instance-group --region=asia-east1

gcloud compute instance-groups managed set-autoscaling anuj-test-instance-group – minNumReplicas=1 --max-num-replicas=4 --target-cpu-utilization=0.6 --region=asia-east1

**load testing:**

sudo apt install cputool

dd if=/dev/zero of=/dev/null &