Authorization and Access related commands  
1.To authenticate a user account with gcloud and minimal user output  
gcloud auth login — brief

2.To list all credentialed accounts and identify the current active account  
gcloud auth list

3.To revoke credentials for a user account (like logging out)  
gcloud auth revoke [test@gmail.com](mailto:test@gmail.com)

4.To authorize gcloud to access Google Cloud Platform using an existing service account while also specifying a project  
gcloud auth activate-service-account [test-service-account@google.com](mailto:test-service-account@google.com) — key-file=/path/key.json — project=sampleproject

5.To set an existing account to be the current active account, run:  
gcloud config set core/account [your-email-account@gmail.com](mailto:your-email-account@gmail.com)

6.If you don’t have an existing account, create one using:  
gcloud init

7.To list the active account name:  
gcloud auth list — filter=status:ACTIVE — format=”value(account)”

8.To list the inactive account names with prefix test:  
gcloud auth list — filter=”-status:ACTIVE account:test\*” — format=”value(account)”

9.To obtain access credentials for your user account  
gcloud auth login

10.To list down the service accounts  
gcloud iam service-accounts list

11.To create a role  
gcloud iam roles create

12.To list down the roles  
gcloud iam roles list

13.To list down the projects  
gcloud projects list

14.To describe the roles  
gcloud iam roles describe

15.To create a configuration  
gcloud config configurations create quantiphi

16.To list down the configurations  
gcloud config configurations list

17.To activate the configuration  
gcloud config configurations activate quantiphi

18.To set an account  
gcloud config set account [quant@quantiphi.com](mailto:quant@quantiphi.com)

19.To list down the projects  
gcloud projects list

20.To set the projects  
gcloud config set project quantiphi-project

21.To list down all the active configurations  
gcloud config list

22.To set the region  
gcloud config set compute/region us-west1

23.To set the zone  
gcloud config set compute/zone us-west1-a

24.To list down the regions  
gcloud compute regions list

25.To list down the zones using filter  
gcloud compute zones list — filter=region:us-central1

26.To get the IAM policy into an yaml file  
gcloud projects get-iam-policy (project\_id) > filename.yaml

27.To set the IAM policy using yaml file  
gcloud projects set-iam-policy project\_id filename.yaml

28.To bind an IAM policy to a specific user  
gcloud projects add-iam-policy-binding project\_id — member user:[qaunt@quantiphi.com](mailto:qaunt@quantiphi.com) — role roles/editor

Billing  
1.To list billing accounts  
gcloud beta billing

2.To link a billing account with a project  
gcloud alpha billing projects link my-project — billing-account 0X0X0X-0X0X0X-0X0X0X

**Compute Service**  
1.To create a disk  
gcloud compute disks create

2.To resize the disks  
gcloud compute disks resize

3.To list down the deprecated images  
gcloud compute images list/describe/create/deprecate

4.To create a instance disabling auto termination of disk  
gcloud compute instances create instance-1 — no-auto-delete — disk exampledisk

5.To create a network in custom mode  
gcloud compute networks create ace-exam-vpc1 — subnet-mode=custom

6.To create a network and enabling flow-logs  
gcloud beta compute networks subnets create cert-exam-vpc-subnet1 — network=cert-  
exam-vpc1 — region=us-west2 — range=10.10.0.0/16 — enable-private-ip-google-  
access — enable-flow-logs

7.Expanding the IP address range  
gcloud compute networks subnets expand-ip-range cert-exam-subnet1 — prefix-length 16

# **Google Kubernetes Engine**

1.listing down the clusters  
gcloud container clusters list

2.Getting details of the cluster  
gcloud container clusters describe — zone us-central1-a standard-cluster-1

3.Listing down Kubernetes nodes  
kubectl get nodes

4.Listing down the Kubernetes pods  
kubectl get pods

5.Describing the nodes  
kubectl describe nodes

6.Describing the pods  
kubectl describe pods

7.Creating a cluster  
gcloud container clusters create example-cluster

8.Resizing the cluster  
gcloud container clusters resize standard-cluster-1 — node-pool default-pool — size 5 — region=us-central1

9.Auto-scaling  
gcloud container clusters update standard-cluster-1 — enable-autoscaling — min-nodes 1 — max-nodes 5 — zone us-central1-a — node -pool default-pool

10.listing down the deployments  
kubectl get deployments

11.Scale the deployments  
kubectl scale deployment nginx-1 — replicas 5

12. Auto scaling the deployments  
kubectl autoscale deployment nginx-1 — max 10 — min 1 — cpu-percent 80

13.Deleting the deployments  
kubectl delete deployment nginx-1

14.List down the services  
kubectl get services

15.Running the deployment  
kubectl run hello-server — image=gcr.io/google/samples/hello-app:1.0 — port 8080

16.Exposing the deployment  
kubectl expose deployment hello-server — type=”LoadBalancer”

17.Deleting the service  
kubectl delete service hello-server

18.Listing down the images  
gcloud container images list

19.Describing the images properties  
gcloud container images describe gcr.io/appengflex-project-1/nginx

App engine  
1.Deploying the application on to app engine  
gcloud app deploy app.yml

2.Stopping the versions of app-engine  
gcloud app versions stop v1 v2

3.Splitting the traffic  
gcloud app services set-traffic serv1 — splits v1=.4,v2=.6

**Cloud Function**  
1.To deploy a function with all the specifications  
gcloud functions deploy cloud\_storage\_function\_quant \  
— runtime python37 \  
— trigger-resource gcp-ace-quant-test-bucket \  
— trigger-event google.storage.object.finalize

2.Deleting a cloud function  
gcloud functions delete

Components  
1.List down the components  
gcloud components list

2.Update the components  
gcloud components update

3.Install the components  
gcloud components install <component-name>

CloudSQL  
1.Create an SQL database  
gcloud sql databases create

2.Connect to the sql  
gcloud sql connect ace-exam-mysql –user=root

3.Create a backup  
gcloud sql backups create — async — instance ace-exam-mysql

4.Export the data from cloudsql instance  
gcloud sql instances export sql quantiphi-mysql1 gs://quantiphi-buckete1/quantiphi-mysqlexport.sql — database=mysql

Cloud PubSub  
1.Topic creation  
gcloud pubsub topics create [TOPIC-NAME]

2.Subscribtion create  
gcloud pubsub subscriptions create [SUBSCRIPTION-NAME] — topic [TOPIC-NAME]

3.Publish a message to specific topic  
gcloud pubsub topics publish topic1 — message “Quantiphi-AI/ML”

4.Pull the messages  
gcloud pubsub subscriptions pull — auto-ack sub1

Dataproc  
1.Creating a cluster  
gcloud dataproc clusters create cluster-bc3d — zone us-west2-a

2.Submitting the jobs  
gcloud dataproc jobs submit spark — cluster cluster-bc3d — jar Quantiphi.jar

BigQuery  
1.Listing down the jobs  
bq ls -j -a project

Datastore  
1.Creating indexes in Datastore  
gcloud datastore create-indexes

2.Export all kinds in the exampleNs namespace in the exampleProject project to the exampleBucket  
gcloud datastore export gs://exampleBucket — namespaces=’exampleNs’ — project=’exampleProject’

CloudStorage  
1.Lists all your buckets  
gsutil ls

2.Help on the topic  
gsutil help <topic>

3.Bucket creation  
gsutil mb gs://quanti-bucket

4.Deletes the bucket.  
gsutil rm gs://<bucket\_name>

5.Files  
copies the local filename into the bucket  
gsutil cp <filename> gs://<bucket\_name>/

6.Copies the local filename into the directory  
gsutil cp <filename> gs://<bucket\_name>/directory/

7.Moves the local src\_filename to the directory and renames it as quanti-fi1  
gsutil mv <src\_filename> gs://<bucket\_name>/directory/quanti-fi1

8.Deletes the file\_or\_dir object.  
gsutil rm gs://<bucket\_name>/file\_or\_dir

9.Changing the storage class  
gsutil rewrite -s [STORAGE\_CLASS] gs://[PATH\_TO\_OBJECT]

10.Modifying the access control list  
gsutil acl ch -u [SERVICE\_ACCOUNT\_ADDRESS]:W gs://[BUCKET\_NAME]

11.Assigning roles  
gsutil iam ch user : <user\_email>:<role1,role2> gs://<BUCKET>

12.Getting Versioning status  
gsutil versioning get gs://bucket

13.Enabling versioning  
gsutil versioning set on gs://bucket

14. Life cycle status  
gsutil lifecycle get gs://bucket > filename.json

15.Setting the life cycle version  
gsutil lifecycle set filename.json gs://bucket