1. Host a static website on custom machine in us-west2 region

Graphical user interface, application

Description automatically generated

Create a compute engine with region as us-west2 and try to ssh into it to install apache2 server

Text

Description automatically generated

Apache2 is installed successfully

Text

Description automatically generated

Curl the local host and see content of index.html



Graphical user interface, text, application, email

Description automatically generated

Use your internal IP to host your apache2 website and check it works or not

1. create a GCS bucket and store files into it. create a cloud function to list down files in GCS buckets.

Graphical user interface, text, application, email

Description automatically generated

Created a storage bucket with name corresponding and uploaded 3 png images as files.

Graphical user interface

Description automatically generated

And created a cloud function with proper scripting to grab the files from storage bucket and print it as logs

Graphical user interface, text, application, email

Description automatically generated

Check the details you have given and location region selected and make sure the traffic should be default to allow all traffic and select service acc which is already given in documentation

Graphical user interface, text, application, email

Description automatically generated

Above code says to import files from storage list all files from the name “nithin-hu19-storagebucket” and print it.

Graphical user interface, text, application, email

Description automatically generated

Test the function to list all the files replicating to cloud function with proper file names given.

3.) create a compute engine instance with nginx and docker installed

Graphical user interface, text, application, email

Description automatically generatedcompute engine instance is created to install docker and nginx

Graphical user interface, text, application, email

Description automatically generated

To automate the code to install when vm starts I used startup-script

Graphical user interface, text

Description automatically generated

Created manually the another vm to install docker and nginx separately

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

4.) create a snapshot of the above compute engine and create GCE

Graphical user interface, text, application, email

Description automatically generated

To copy data from one vm to another I used snapshot as a interface to connect 2 vms.

Graphical user interface, text, application, email

Description automatically generatedAttached vm to snapshot and labels appropriate for it.

Graphical user interface, application

Description automatically generatedCreated another instance and editing book disk by attaching snapshot created to it with a disk size of 10gb

Graphical user interface, application, Teams

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Finally tried to check the docker and nginx installation is replicated to this instance by ssh into it.