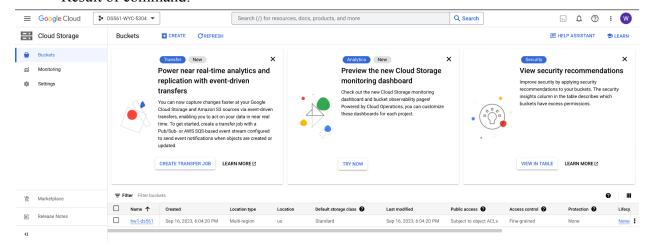1. Make a storage bucket

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud storage buckets create gs://hw1-ds561
Creating gs://hw1-ds561/...
wycheng@cloudshell:~ (ds561-wyc-5304)$
```
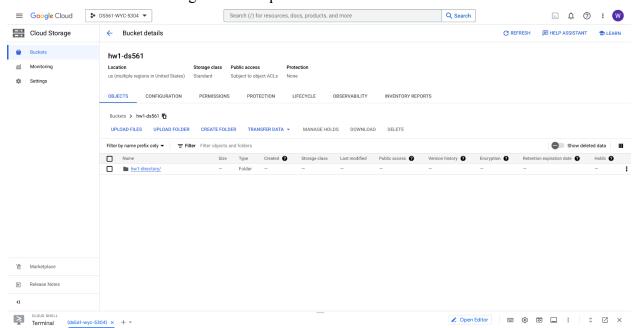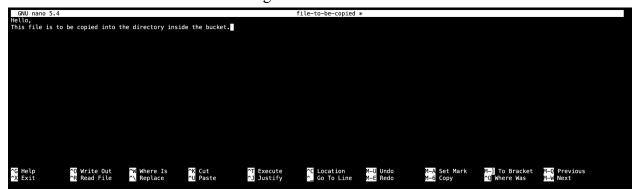
Result of command:

2. Make a directory inside bucket
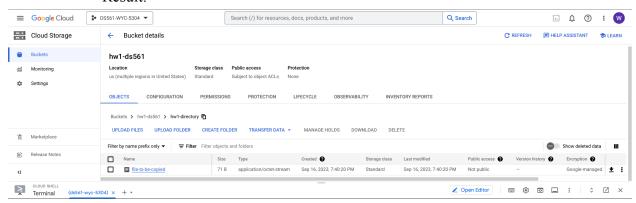   - Created through console option *"CREATE FOLDER"*

3. Copy file into directory
   - Create a file to be copied
     - Name: file-to-be-copied
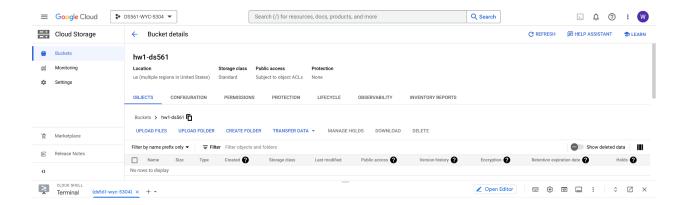   - With the following content

   - Command to copy file

   - Result:

4. Delete the directory with single operation

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gsutil rm -r gs://hw1-ds561/hw1-directory
Removing gs://hw1-ds561/hw1-directory/#1694907327637060...
Removing gs://hw1-ds561/hw1-directory/file-to-be-copied#1694907620508657...
/ [2 objects]
Operation completed over 2 objects.
wycheng@cloudshell:~ (ds561-wyc-5304)$
```

- Result:

5. Make a VM

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud compute instances create hw1-vm
Did you mean zone [us-east1-b] for instance: [hw1-vm] (Y/n)?

API [compute.googleapis.com] not enabled on project [ds561-wyc-5304]. Would you like to enable and retry (this will take a few minutes)? (y/N)?  y

Enabling service [compute.googleapis.com] on project [ds561-wyc-5304]...
Operation "operations/acf.p2-907220276251-013a26bd-eab2-46dc-80f6-ca79f84f2f4a" finished successfully.
Created [https://www.googleapis.com/compute/v1/projects/ds561-wyc-5304/zones/us-east1-b/instances/hw1-vm].
NAME: hw1-vm
ZONE: us-east1-b
MACHINE_TYPE: n1-standard-1
PREEMPTIBLE:
INTERNAL_IP: 10.142.0.2
EXTERNAL_IP: 35.229.43.177
STATUS: RUNNING
wycheng@cloudshell:~ (ds561-wyc-5304)$
```
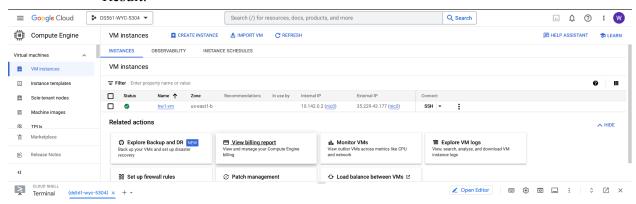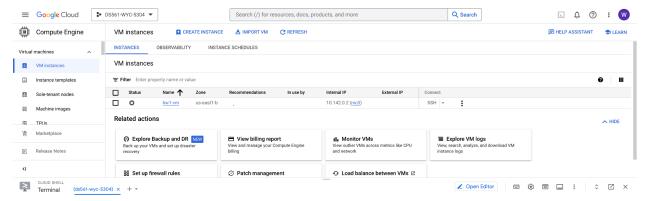
- Result:

6. Pause the VM

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud compute instances stop hw1-vm
Did you mean zone [us-east1-b] for instance: [hw1-vm] (Y/n)?

Stopping instance(s) hw1-vm...done.
Updated [https://compute.googleapis.com/compute/v1/projects/ds561-wyc-5304/zones/us-east1-b/instances/hw1-vm].
wycheng@cloudshell:~ (ds561-wyc-5304)$ 
```

- Result:

7. Delete the VM

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud compute instances delete hw1-vm
Did you mean zone [us-east1-b] for instance: [hw1-vm] (Y/n)?

The following instances will be deleted. Any attached disks configured to be auto-deleted will be deleted unless they are attached to any other instances or the `--keep-disks`
flag is given and specifies them for keeping. Deleting a disk is irreversible and any data on the disk will be lost.
 - [hw1-vm] in [us-east1-b]

Do you want to continue (Y/n)?

Deleted [https://www.googleapis.com/compute/v1/projects/ds561-wyc-5304/zones/us-east1-b/instances/hw1-vm].
wycheng@cloudshell:~ (ds561-wyc-5304)$ 
```
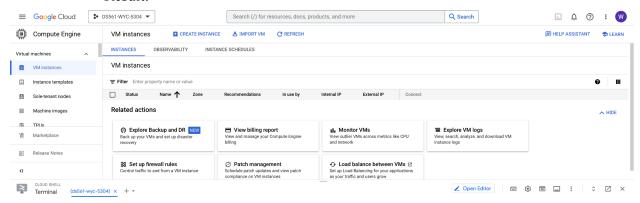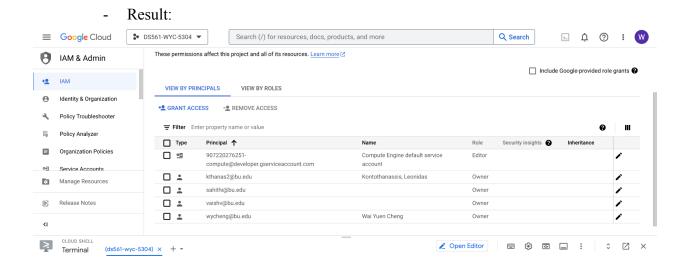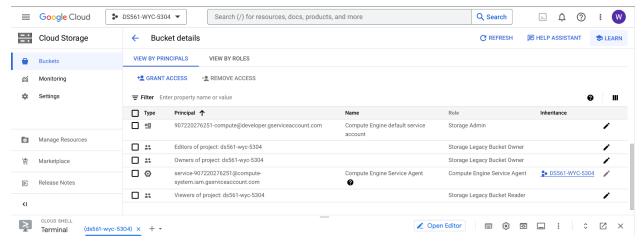
- Result:

8. Make a service account and grant permission

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud iam service-accounts create hw1-ac
```

- Result:

Grant Permission To Access Bucket

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gsutil iam ch serviceAccount:907220276251-compute@developer.gserviceaccount.com:roles/storage.admin gs://hw1-ds561
wycheng@cloudshell:~ (ds561-wyc-5304)$
```
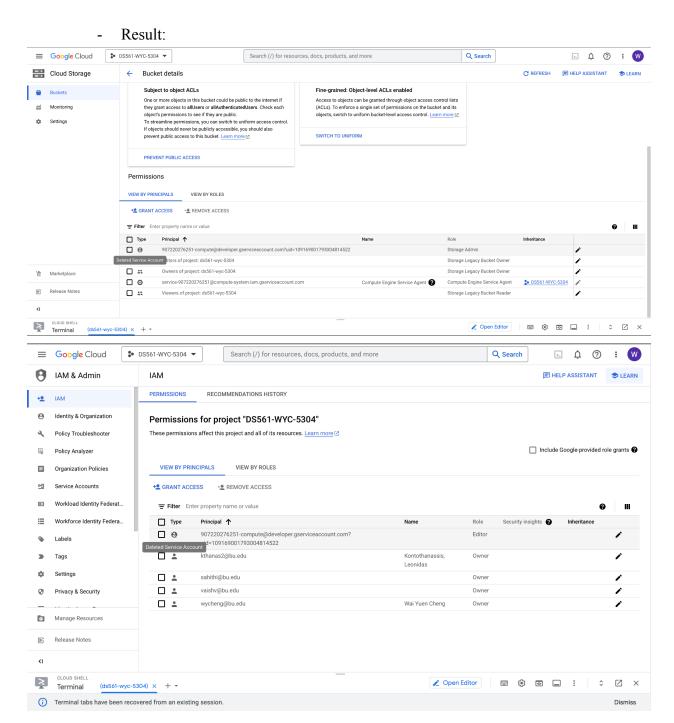
- Result:

9. Delete Service Account

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud iam service-accounts delete 907220276251-compute@developer.gserviceaccount.com
You are about to delete service account [907220276251-compute@developer.gserviceaccount.com].

Do you want to continue (Y/n)?

deleted service account [907220276251-compute@developer.gserviceaccount.com]
wycheng@cloudshell:~ (ds561-wyc-5304)$
```

- Result:

10. Delete Bucket

```
wycheng@cloudshell:~ (ds561-wyc-5304)$ gcloud storage buckets delete gs://hw1-ds561
Removing gs://hw1-ds561/...
  Completed 1/1
wycheng@cloudshell:~ (ds561-wyc-5304)$
```

- Result: