GCS and Cloud SQL

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1. Host a static website using GCS bucket.

Ans.

Steps to host a Static Website

1. Create a bucket in GCS
2. Upload a html file (index.html)
3. In the file options, click on Edit Permissions
4. Click on Add Item
5. Enter the following in the respective columns

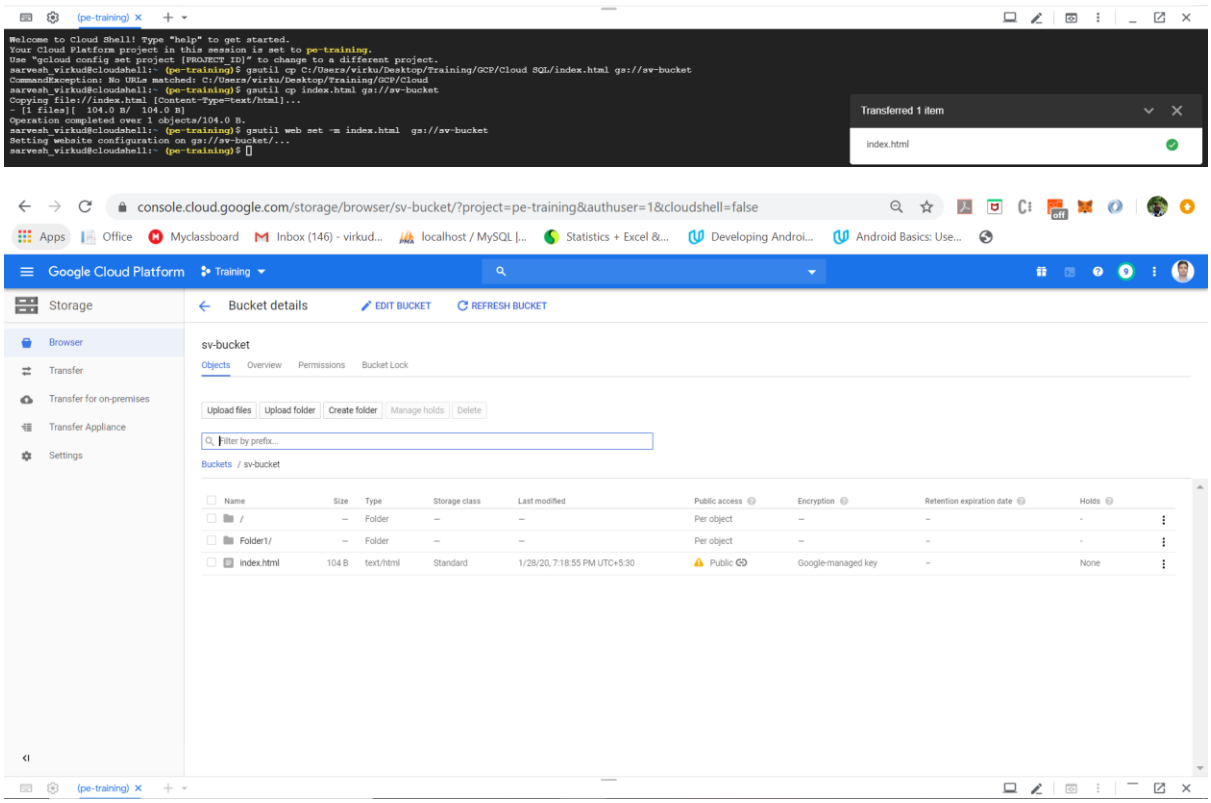
Entity-User

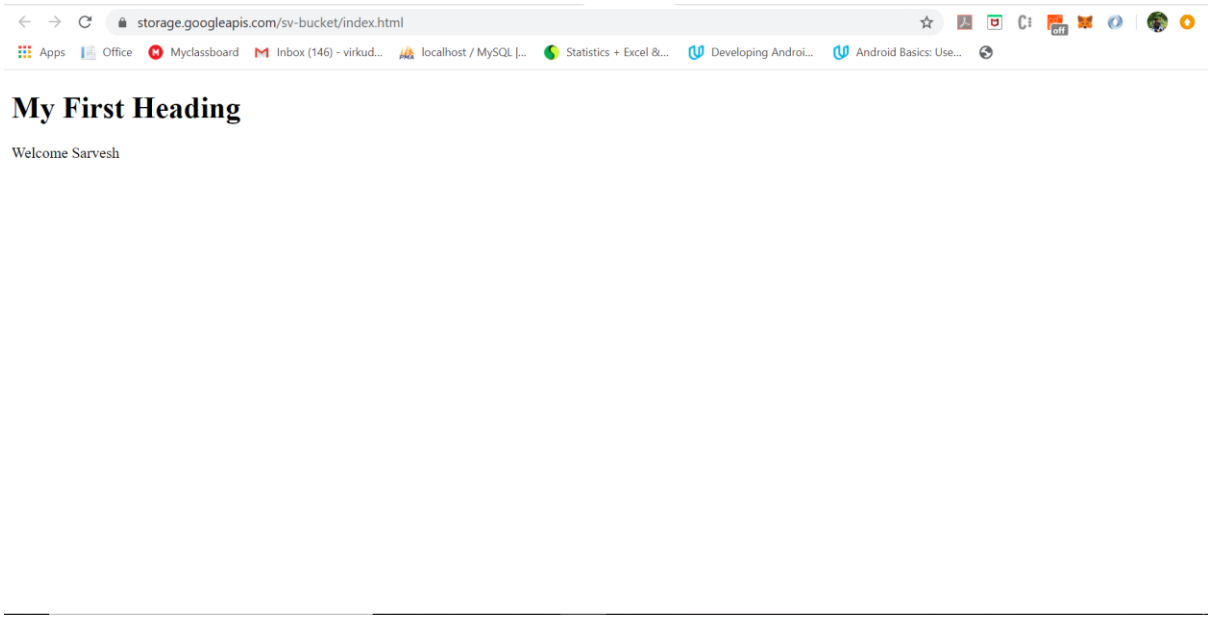
Name-allUsers

Access- Reader

6. Click on Save
7. Public Access is assigned to the file
8. Click on the IP generated

Our static website is hosted.





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index.html file

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>Welcome Sarvesh</p>
</body>
</html>
```

2. Create a folder structure in the bucket as follows (manually):

-folder1

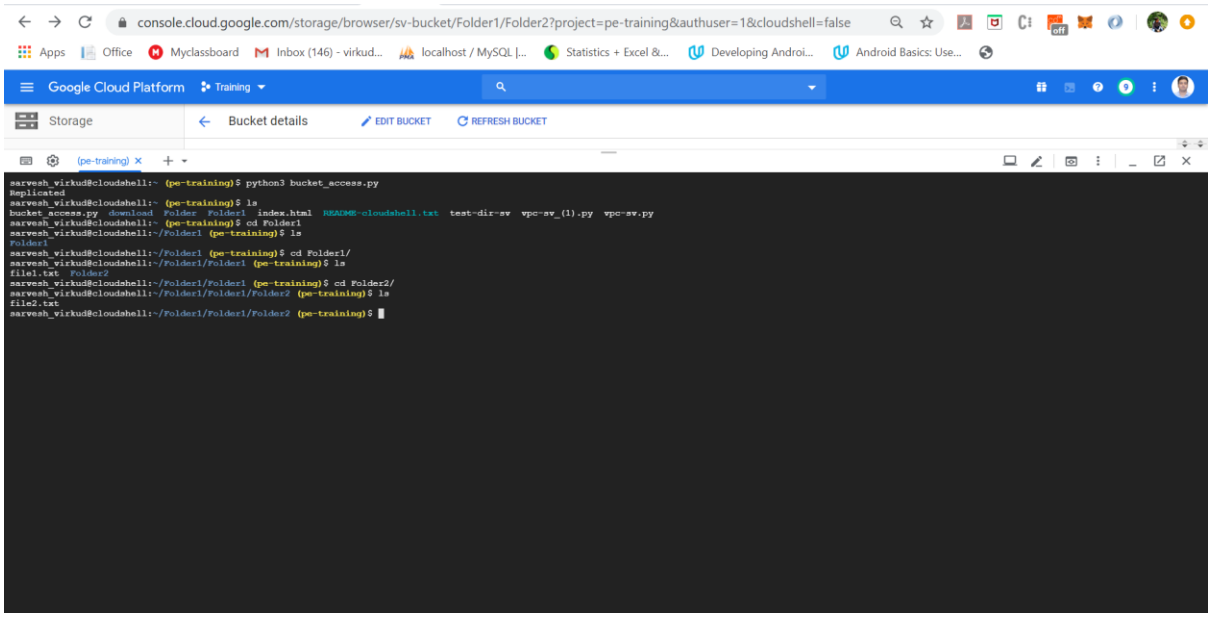
- file1.txt

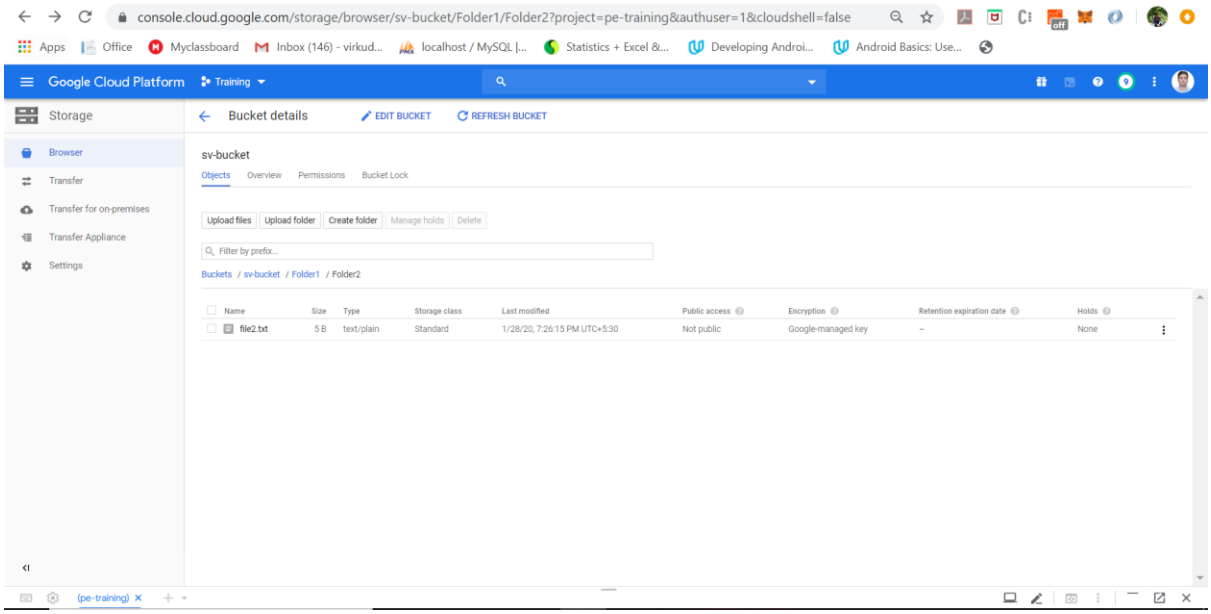
-folder2

-file2.txt

Download the entire folder (folder1) on the local (cloud shell or vm) using python3 with standard library.

Ans.





Code:

```
from google.cloud import storage
import os

BUCKET_NAME = 'sv-bucket'
DOWNLOAD_FOLDER = 'Folder1'
DESTINATION_FOLDER = 'Folder1/'

# make destination folder in local machine
try:
    os.mkdir(DESTINATION_FOLDER)
except Exception as e:
    print('Folder Exists.')

def main():
    client = storage.Client()
    bucket = client.get_bucket(BUCKET_NAME)
    blobs = bucket.list_blobs()

    for b in blobs:

        fold = DESTINATION_FOLDER + ''

        if b.name.startswith(DOWNLOAD_FOLDER) and b.name[-1] != '/':

            folder_struct = b.name.split('/')

            for folder in folder_struct[:-1]:
                fold += folder + '/'
```

```
            try:
                os.mkdir(fold)
            except Exception as e:
                pass

        b.download_to_filename(fold + folder_struct[-1])

    print('Replicated')

if __name__ == '__main__':
    main()
```