

# GCS and Cloud SQL

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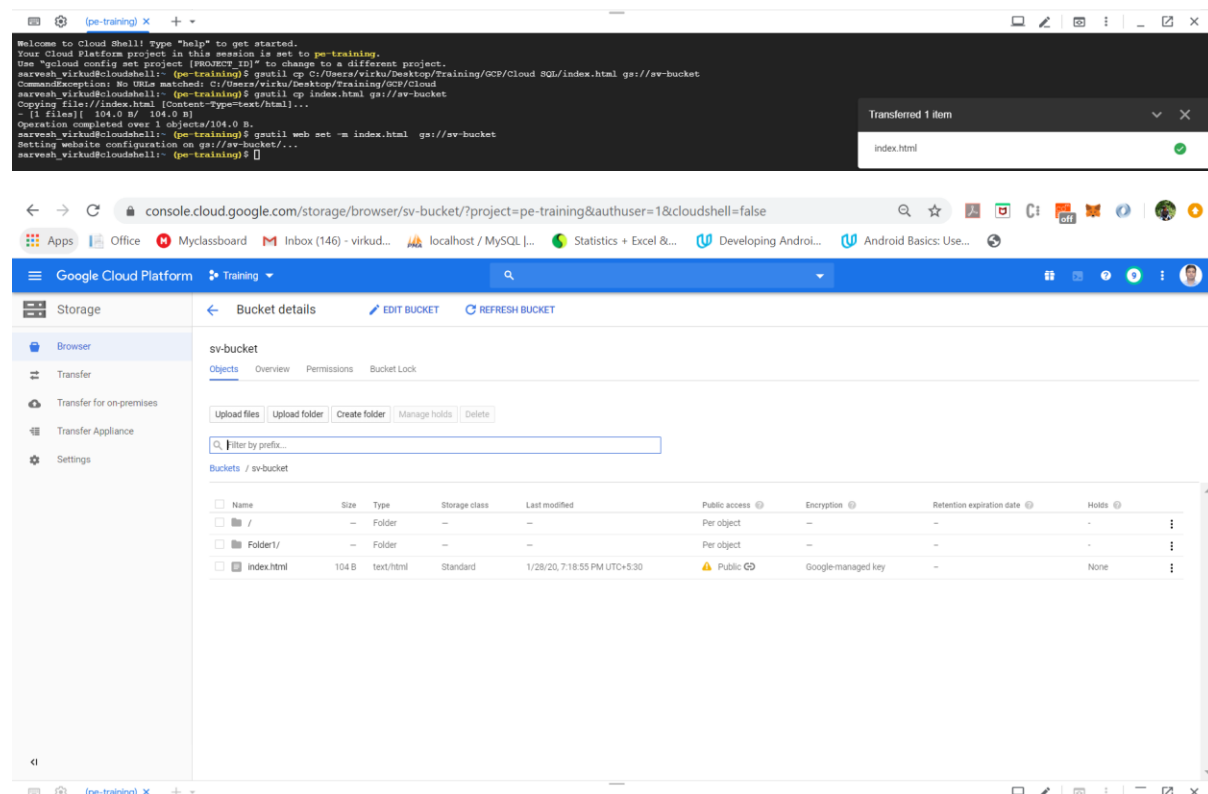
## 1. Host a static website using GCS bucket.

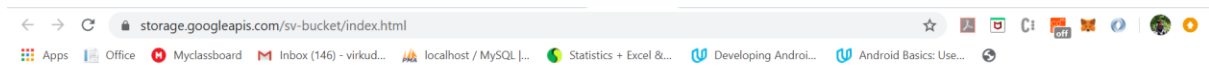
Ans.

### 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.





# My First Heading

Welcome Sarvesh

---

## index.html file

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>My First Heading</h1>
```

```
<p>Welcome Sarvesh</p>
```

```
</body>
```

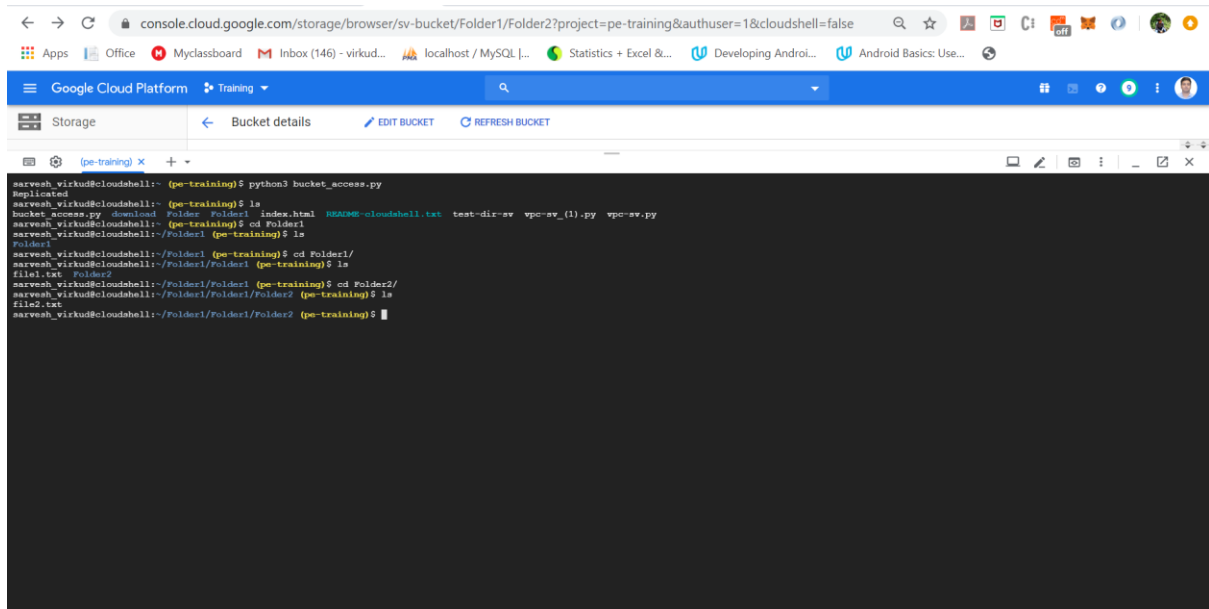
```
</html>
```

## 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.



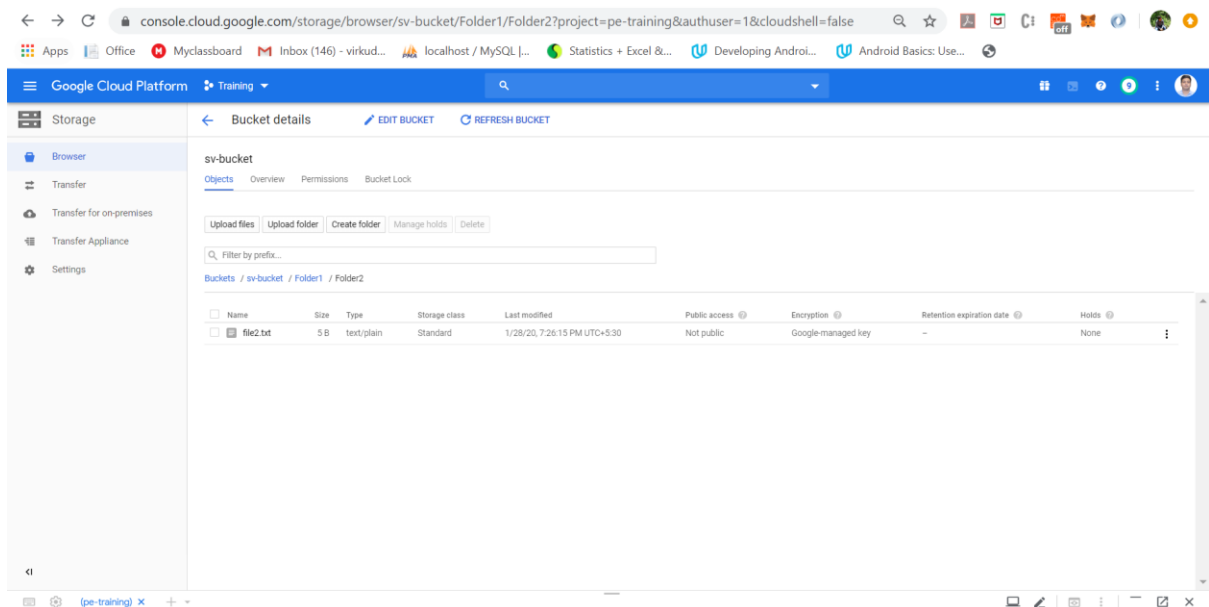
```
console.cloud.google.com/storage/browser/sv-bucket/Folder1/Folder2?project=pe-training&authuser=1&cloudshell=false

Google Cloud Platform Training

Storage Bucket details EDIT BUCKET REFRESH BUCKET

(pe-training) x +

sarvesh_virkud@cloudshell:~ (pe-training)$ python3 bucket_access.py
#aplicated
sarvesh_virkud@cloudshell:~ (pe-training)$ ls
bucket_access.py download Folder Folder1 index.html README-cloudshell.txt test-dir-sw vpc-sw (1).py vpc-sw.py
sarvesh_virkud@cloudshell:~ (pe-training)$ cd Folder1
sarvesh_virkud@cloudshell:~/Folder1 (pe-training)$ ls
Folder1
sarvesh_virkud@cloudshell:~/Folder1 (pe-training)$ cd Folder1/
sarvesh_virkud@cloudshell:~/Folder1/Folder1 (pe-training)$ ls
file1.txt Folder2
sarvesh_virkud@cloudshell:~/Folder1/Folder1 (pe-training)$ cd Folder2/
sarvesh_virkud@cloudshell:~/Folder1/Folder1/Folder2 (pe-training)$ ls
file2.txt
sarvesh_virkud@cloudshell:~/Folder1/Folder1/Folder2 (pe-training)$
```



Name	Size	Type	Storage class	Last modified	Public access	Encryption	Retention expiration date	Hold
file2.txt	5 B	text/plain	Standard	1/28/20, 7:26:15 PM UTC+5:30	Not public	Google-managed key	-	None

**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()
```