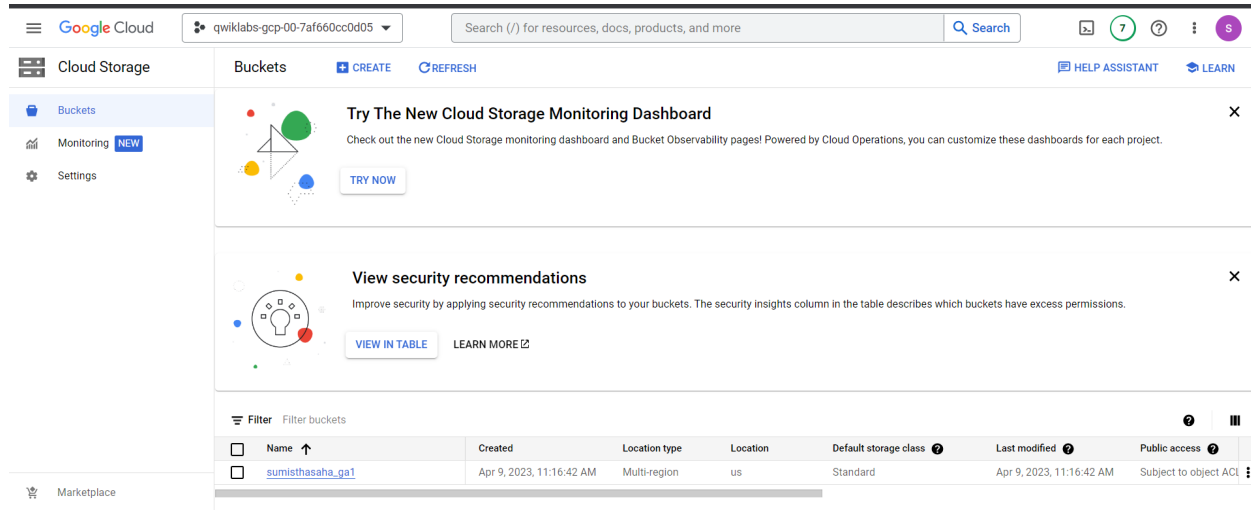


Big Data Graded Assignment 2

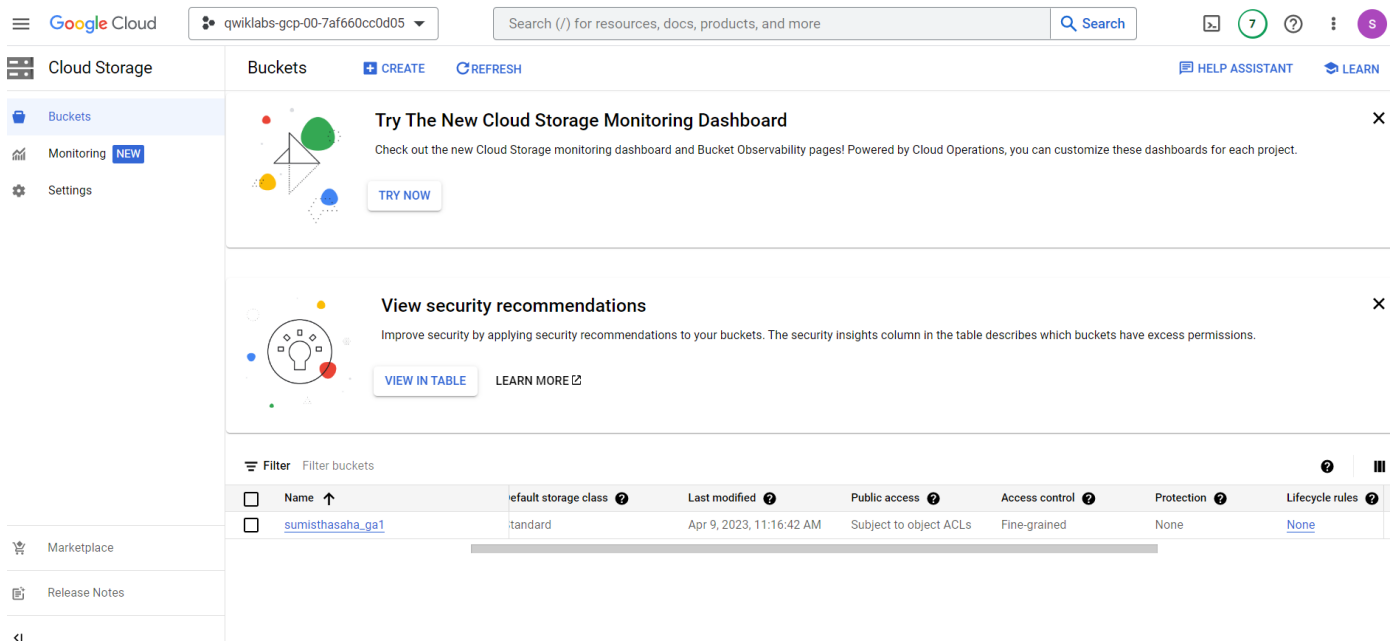
❖ Step 1 : Creating a bucket



The screenshot shows the Google Cloud Console interface for the 'Buckets' page. The left sidebar contains 'Cloud Storage', 'Buckets', 'Monitoring', and 'Settings'. The main content area has a 'Buckets' header with 'CREATE' and 'REFRESH' buttons. Below the header are two promotional cards: 'Try The New Cloud Storage Monitoring Dashboard' and 'View security recommendations'. At the bottom, a table lists the buckets.

Name	Created	Location type	Location	Default storage class	Last modified	Public access
sumisthasaha_ga1	Apr 9, 2023, 11:16:42 AM	Multi-region	us	Standard	Apr 9, 2023, 11:16:42 AM	Subject to object ACL

❖ Step 2 : Bucket with public access



The screenshot shows the Google Cloud Console interface for the 'Buckets' page, similar to the previous one but with additional columns in the table. The table shows the bucket 'sumisthasaha_ga1' with public access set to 'Subject to object ACLs'.

Name	Default storage class	Last modified	Public access	Access control	Protection	Lifecycle rules
sumisthasaha_ga1	standard	Apr 9, 2023, 11:16:42 AM	Subject to object ACLs	Fine-grained	None	None

❖ Step 3 : Upload text file in the bucket

Google Cloud

qwiklabs-gcp-00-7af660cc0d05

Search (/) for resources, docs, products, and more

Search

7

?

⋮

S

Navigation menu

storage

Buckets

Monitoring NEW

Settings

← Bucket details

sumisthasaha_ga1

Location

us (multiple regions in United States)

Storage class

Standard

Public access

Subject to object ACLs

Protection

None

OBJECTS

CONFIGURATION

PERMISSIONS

PROTECTION

LIFECYCLE

OBSERVABILITY NEW

Buckets > sumisthasaha_ga1

UPLOAD FILES

UPLOAD FOLDER

CREATE FOLDER

TRANSFER DATA

MANAGE HOLDS

DOWNLOAD

DELETE

Filter by name prefix only

Filter

Filter objects and folders

Show deleted data

<input type="checkbox"/>	Name	Size	Type	Created	Storage class	Last modified	Public access	Version history
<input type="checkbox"/>	week1.txt	33 B	text/plain	Apr 9, 2023, 11:16:54 AM	Standard	Apr 9, 2023, 11:20:15 AM	Public to internet Copy URL	<div>—</div> <div>⬇</div> <div>⋮</div>

Marketplace

Release Notes

❖ Step 4 : File with public access

LOAD FILES

UPLOAD FOLDER

by name prefix only

Filter

Name

week1.txt

Entity 1 *

Public

Entity 2 *

Project

Entity 3 *

Project

Entity 4 *

Project

Entity 5 *

Public

Name 1

allUsers

Name 2

owners-30577710534

Name 3

editors-30577710534

Name 4

viewers-30577710534

Name 5 *

allUsers

Access 1

Reader

Access 2 *

Owner

Access 3 *

Owner

Access 4 *

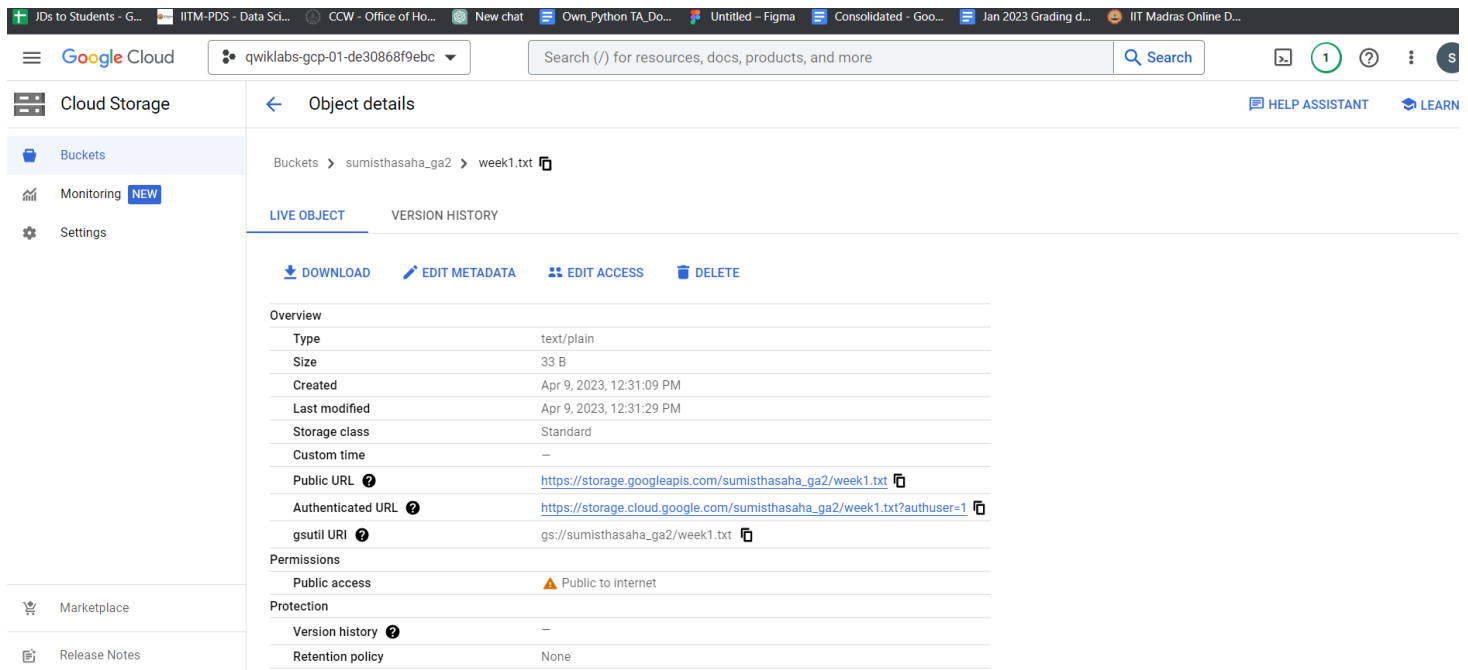
Reader

Access 5 *

Reader

+ ADD ENTRY

❖ Step 5 : File with public url



The screenshot shows the Google Cloud Storage interface. The left sidebar contains navigation options: Cloud Storage, Buckets, Monitoring (NEW), and Settings. The main content area displays the 'Object details' for 'week1.txt' in the 'sumisthasaha_ga2' bucket. The object is a 'text/plain' file, 33 B in size, created and last modified on April 9, 2023, at 12:31:09 PM and 12:31:29 PM respectively. It is stored in the 'Standard' storage class. The 'Public URL' is https://storage.googleapis.com/sumisthasaha_ga2/week1.txt. The 'Authenticated URL' is https://storage.cloud.google.com/sumisthasaha_ga2/week1.txt?authuser=1. The 'gsutil URI' is gs://sumisthasaha_ga2/week1.txt. The 'Permissions' section shows 'Public access' is enabled, indicated by a warning icon and the text 'Public to internet'. The 'Protection' section shows 'Version history' is disabled and 'Retention policy' is set to 'None'.

Cloud Storage

Object details

Buckets > sumisthasaha_ga2 > week1.txt

LIVE OBJECT VERSION HISTORY

DOWNLOAD EDIT METADATA EDIT ACCESS DELETE

Overview

Type	text/plain
Size	33 B
Created	Apr 9, 2023, 12:31:09 PM
Last modified	Apr 9, 2023, 12:31:29 PM
Storage class	Standard
Custom time	—
Public URL	https://storage.googleapis.com/sumisthasaha_ga2/week1.txt
Authenticated URL	https://storage.cloud.google.com/sumisthasaha_ga2/week1.txt?authuser=1
gsutil URI	gs://sumisthasaha_ga2/week1.txt

Permissions

Public access	Public to internet
---------------	--------------------

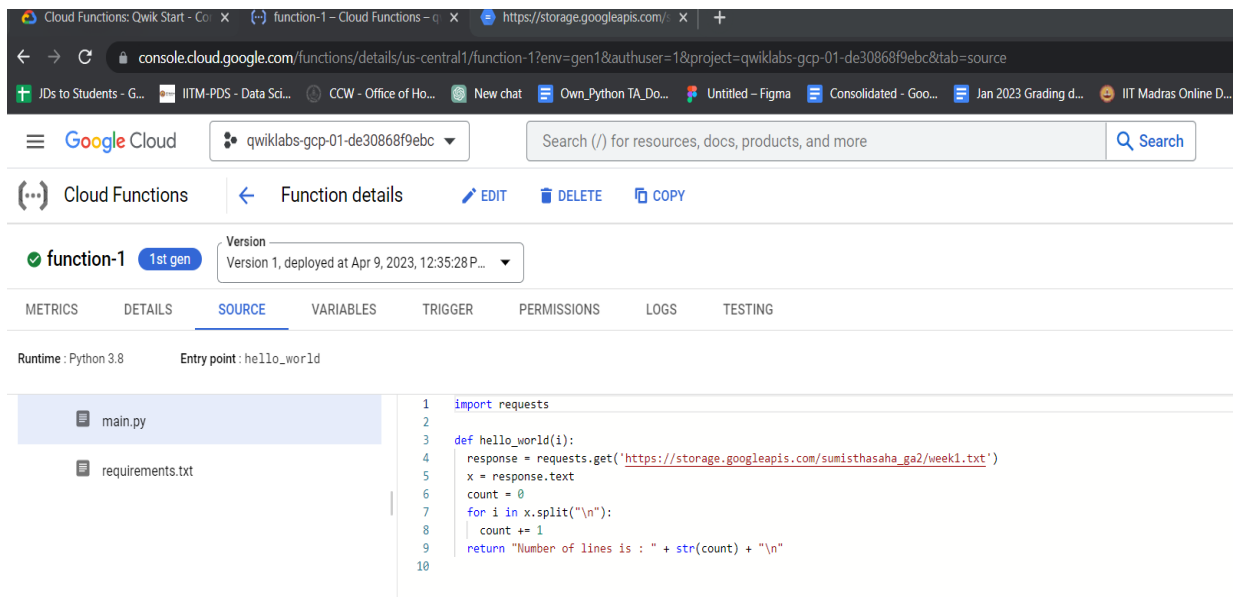
Protection

Version history	—
Retention policy	None

❖ Step 6 : Opening file from the public url

```
Line1
Line2
Line3
Line4
Line5
```

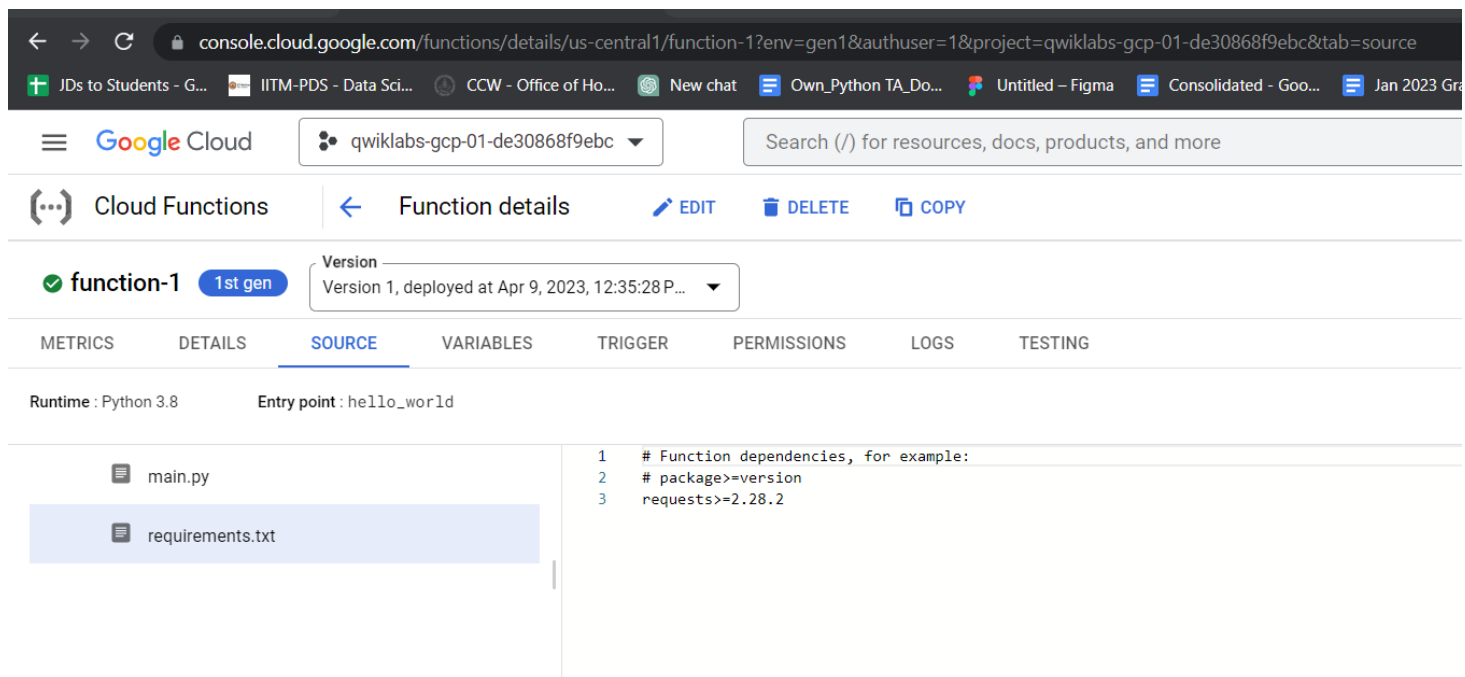
❖ Step 7 : Function to compute no of lines



The screenshot shows the Google Cloud Functions console for a project named 'qwiklabs-gcp-01-de30868f9ebc'. The 'function-1' is selected, showing its details and source code. The source code is a Python function named 'hello_world(i)' that uses the 'requests' library to fetch data from 'https://storage.googleapis.com/sumisthasaha_ga2/week1.txt'. The function counts the number of lines in the fetched text and returns a string indicating the count.

```
1 import requests
2
3
4 def hello_world(i):
5     response = requests.get('https://storage.googleapis.com/sumisthasaha_ga2/week1.txt')
6     x = response.text
7     count = 0
8     for i in x.split("\n"):
9         count += 1
10    return "Number of lines is : " + str(count) + "\n"
```

❖ Step 8 : Requirements.txt



The screenshot shows the Google Cloud Functions console for the same project. The 'requirements.txt' file is selected, showing its content. The file specifies the 'requests' library with a version greater than or equal to 2.28.2.

```
1 # Function dependencies, for example:
2 # package>=version
3 requests>=2.28.2
```

❖ Step 9 : Testing from Cloud Console with correct output

The screenshot shows the Google Cloud Functions console interface. At the top, the breadcrumb navigation indicates the path: Cloud Functions > Function details. The function name is 'function-1' (1st gen), deployed on April 9, 2023. The 'TESTING' tab is selected, displaying a 'Configure Triggering Event' section on the left and a 'Test Command' section on the right. The 'Test Command' section contains a curl command for testing the function. Below these sections is a 'CLOUD SHELL' terminal window showing the execution of the curl command and its output. A blue callout box on the right side of the terminal provides a link to see details about the Cloud Shell session and usage quota.

Configure Triggering Event

Press Alt+F1 for Accessibility Options.

1 {}

Test Command [TEST IN CLOUD SHELL](#)

```
curl -m 70 -X POST https://us-central1-qwiklabs-gcp-01-de30868f9ebc.cloudfunctions.net/function-1 \
-H "Authorization: bearer $(gcloud auth print-identity-token)" \
-H "Content-Type: application/json" \
-d '{}'
```

CLOUD SHELL

Terminal (qwiklabs-gcp-01-de30868f9ebc) x +

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-01-de30868f9ebc**.
Use "gcloud config set project [PROJECT ID]" to change to a different project.
student_02_81e01e94b9a1@cloudshell:~ (qwiklabs-gcp-01-de30868f9ebc) \$ curl -m 70 -X POST https://us-central1-qwiklabs-gcp-01-de30868f9ebc.cloudfunctions.net/function-1 \
> -H "Authorization: bearer \$(gcloud auth print-identity-token)" \
> -H "Content-Type: application/json" \
> -d '{}'

Number of lines is : 5

```
student_02_81e01e94b9a1@cloudshell:~ (qwiklabs-gcp-01-de30868f9ebc) $ curl -m 70 -X POST https://us-central1-qwiklabs-gcp-01-de30868f9ebc.cloudfunctions.net/function-1 \
> -H "Authorization: bearer $(gcloud auth print-identity-token)" \
> -H "Content-Type: application/json" \
> -d '{}'
```

[Click here to see details about your Cloud Shell session and usage quota](#)
Got it!