Name : Shivam Tawari
Roll no: A-58
Subject : Cloud computing

Aim: Install Google App Engine, create simple web application.

Theory:

Google App Engine :
Google app engine is a cloud computing platform as a service that allows web app developers and enterprises access to Google's scalable hosting and tier 1 internet service.

The app engine requires that apps be written in Java or Python, store data in Google Bigtable and use the Google query language. Non-compliant applications require modification to use App Engine.

Google App Engine provides more scalable infrastructure than other hosting services such as Amazon Elastic compute cloud (EC2).

The app engine also eliminates some system administration and developmental tasks to make it easier to write scalable applications

Google App Engine is free up to a certain amount of resources usage. Users exceeding the per day or per-minute usage rates for CPU resources, storage, number of API calls or requests and concurrent requests can pay for more of these resources.

Conclusion: Hence, we have successfully completed Google App Engine to create simple web application.

Practical – 7

Name: Shivam Tawari

Roll no: A-58

Project info

Project name
Cloud Computing Practical 7

Project ID
cloud-computing-practical-7

Project number
894414391981

ADD PEOPLE TO THIS PROJECT

→ Go to project settings

Resources

This project has no resources

Trace

No trace data from the last 7 days

API APIs

Requests (requests/sec)

⚠ No data is available for the selected time frame.

Sat 23   0:15   0:30   0:45

→ Go to APIs overview

Google Cloud Platform status

All services normal

→ Go to Cloud status dashboard

Monitoring

Create my dashboard

Set up alerting policies

Create uptime checks

View all dashboards

→ Go to Monitoring

API Error Reporting

Project info

Project name
Cloud Computing Practical 7

Project ID
cloud-computing-practical-7

API APIs

Requests (requests/sec)

Google Cloud Platform status

All services normal

→ Go to Cloud status dashboard

CLOUD SHELL
Terminal   (cloud-computing-practical-7) ✕   + ▾   ✏ Open editor

```
If you decide to proceed anyway, your user credentials may be visible
to others with access to this virtual machine. Are you sure you want
to authenticate with your personal account?

Do you want to continue (Y/n)?  Y

Go to the following link in your browser:

    https://accounts.google.com/o/oauth2/auth?response_type=code&client_id=764086051850-6qr4p6gpi6hn506pt8ejuq83di341hur.apps.googleusercontent.com&redirect_uri=urn%3Aietf
%3Awg%3Aoauth%3A2.0%3Aoob&scope=openid+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform+https%3A%2F%2Fwww.
googleapis.com%2Fauth%2Faccounts.reauth&state=rnbV4Xod6OvUMrMxkviMCPXUDI1Z67&prompt=consent&access_type=offline&code_challenge=PPBSIfNSd5GanBmmFJ6DTjczUEwy0JYwnNWuz_qhLyI&
code_challenge_method=S256

Enter verification code: 4/1AX4XfWh3tTGIfLFMgHsfPzqSeqITDbNvpynKo2zkujU6ro-_QhY-BowTmBU

Credentials saved to file: [/tmp/tmp.DkLsFRaKJU/application_default_credentials.json]

These credentials will be used by any library that requests Application Default Credentials (ADC).

Quota project "cloud-computing-practical-7" was added to ADC which can be used by Google client libraries for billing and quota. Note that some services may still bill the
 project owning the resource.
shivamtawari@cloudshell:~ (cloud-computing-practical-7)$ ▯
```

Project info

Project name
Cloud Computing Practical 7

Project ID
cloud-computing-practical-7

API APIs

Requests (requests/sec)

Google Cloud Platform status

All services normal

→ Go to Cloud status dashboard

CLOUD SHELL
Terminal   (cloud-computing-practical-7) ✕   + ▾   ✏ Open editor

```
%3Awg%3Aoauth%3A2.0%3Aoob&scope=openid+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform+https%3A%2F%2Fwww.
googleapis.com%2Fauth%2Faccounts.reauth&state=rnbV4Xod6OvUMrMxkviMCPXUDI1Z67&prompt=consent&access_type=offline&code_challenge=PPBSIfNSd5GanBmmFJ6DTjczUEwy0JYwnNWuz_qhLyI&
code_challenge_method=S256

Enter verification code: 4/1AX4XfWh3tTGIfLFMgHsfPzqSeqITDbNvpynKo2zkujU6ro-_QhY-BowTmBU

Credentials saved to file: [/tmp/tmp.DkLsFRaKJU/application_default_credentials.json]

These credentials will be used by any library that requests Application Default Credentials (ADC).

Quota project "cloud-computing-practical-7" was added to ADC which can be used by Google client libraries for billing and quota. Note that some services may still bill the
 project owning the resource.
shivamtawari@cloudshell:~ (cloud-computing-practical-7)$ git clone https://github.com/GoogleCloudPlatform/python-docs-samples
Cloning into 'python-docs-samples'...
remote: Enumerating objects: 57969, done.
remote: Counting objects: 100% (174/174), done.
remote: Compressing objects: 100% (143/143), done.
remote: Total 57969 (delta 43), reused 85 (delta 22), pack-reused 57795
Receiving objects: 100% (57969/57969), 79.25 MiB | 17.12 MiB/s, done.
Resolving deltas: 100% (32807/32807), done.
shivamtawari@cloudshell:~ (cloud-computing-practical-7)$ cd python-docs-samples/appengine/standard_python3/building-an-app/building-an-app-1
shivamtawari@cloudshell:~/python-docs-samples/appengine/standard_python3/building-an-app/building-an-app-1 (cloud-computing-practical-7)$ ▮
```

Google Cloud Platform   Cloud Computing Practical 7   app e

Project info

Project name
Cloud Computing Practical 7

Project ID
cloud-computing-practical-

API APIs

Requests (requests/sec)

Google Cloud Platform status

All services normal

Go to Cloud status dashboard

CLOUD SHELL
Terminal   (cloud-computing-practical-7)

Open editor

```
[18] us-east1         (supports standard and flexible and search_api)
[19] us-east4         (supports standard and flexible and search_api)
[20] us-west1         (supports standard and flexible)
[21] us-west2         (supports standard and flexible and search_api)
[22] us-west3         (supports standard and flexible and search_api)
[23] us-west4         (supports standard and flexible and search_api)
[24] cancel
Please enter your numeric choice:  17

Creating App Engine application in project [cloud-computing-practical-7] and region [us-central]....done.
Services to deploy:

descriptor:              [/home/shivamtawari/python-docs-samples/appengine/standard_python3/building-an-app/building-an-app-1/app.yaml]
source:                  [/home/shivamtawari/python-docs-samples/appengine/standard_python3/building-an-app/building-an-app-1]
target project:          [cloud-computing-practical-7]
target service:          [default]
target version:          [20211022t193500]
target url:              [https://cloud-computing-practical-7.uc.r.appspot.com]
target service account:  [App Engine default service account]

Do you want to continue (Y/n)?  Y
```