CLOUD COMPUTING
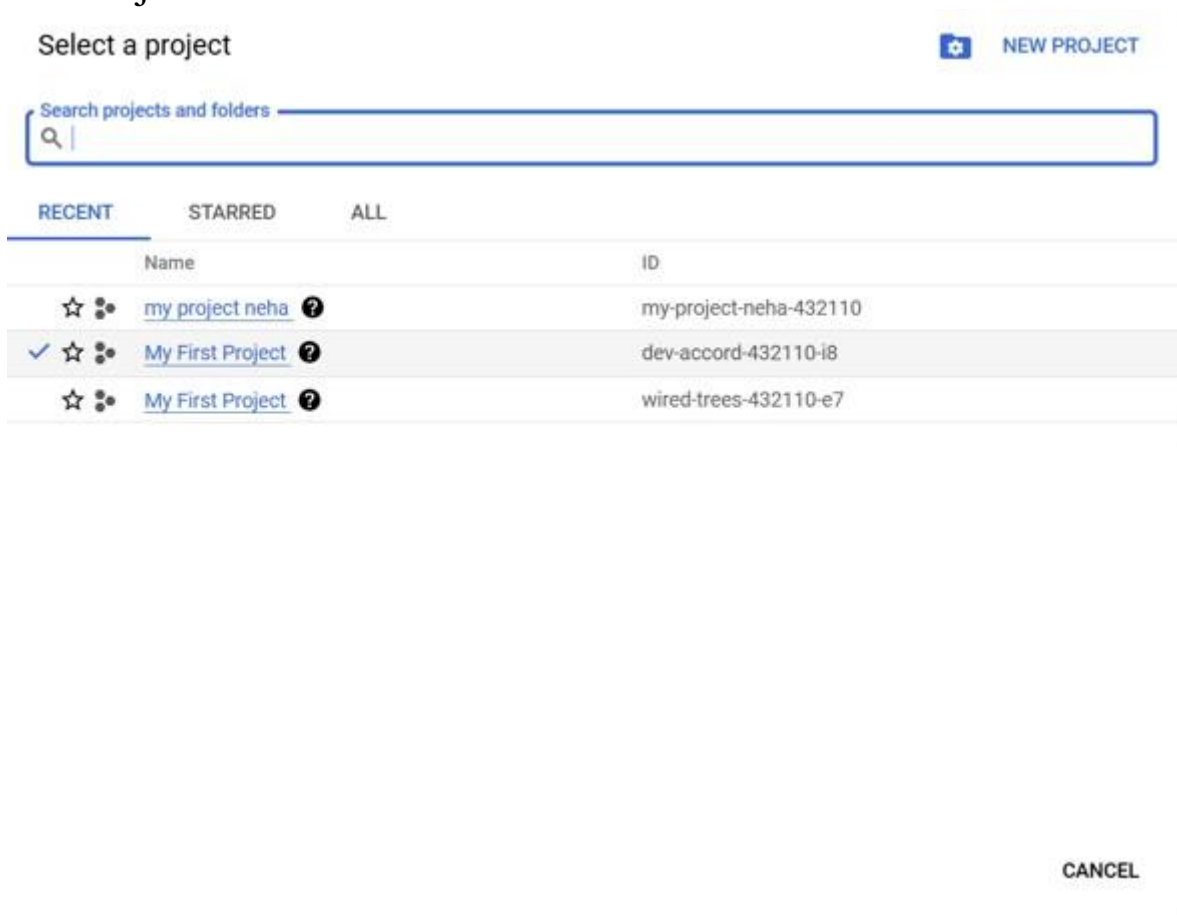
PRACTICAL 4:To Demonstrate Platform as a Service using Google app Engine

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Roll No: A063

MSc SDS Batch 2

1. Create an account with Google Cloud Platform and Click on My First Project and then NEW PROJECT.
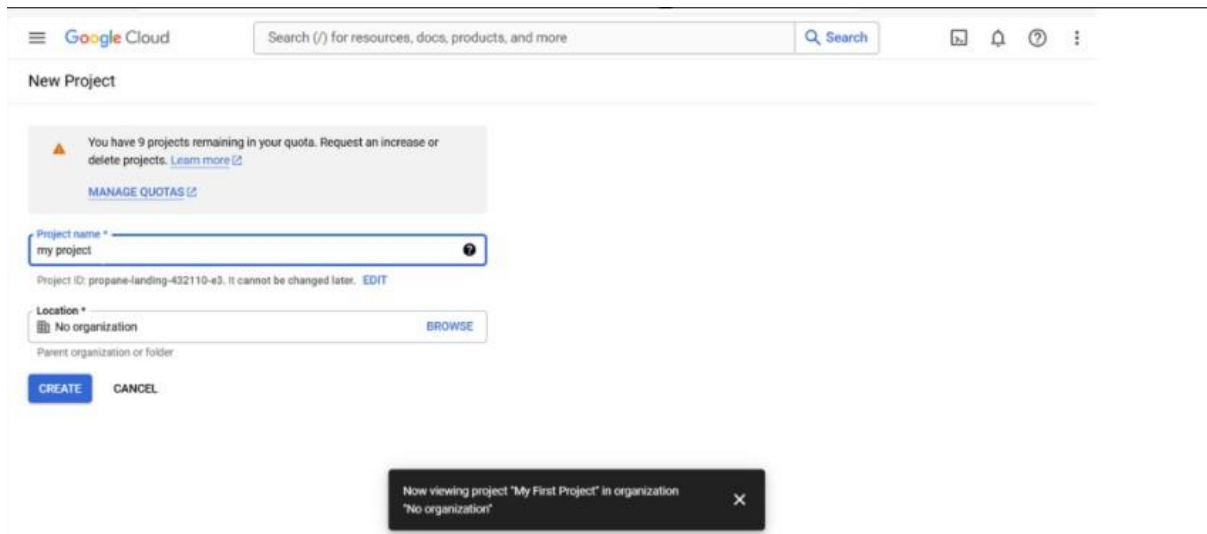
2. Provide Project name "my project ". Location can be No organization.

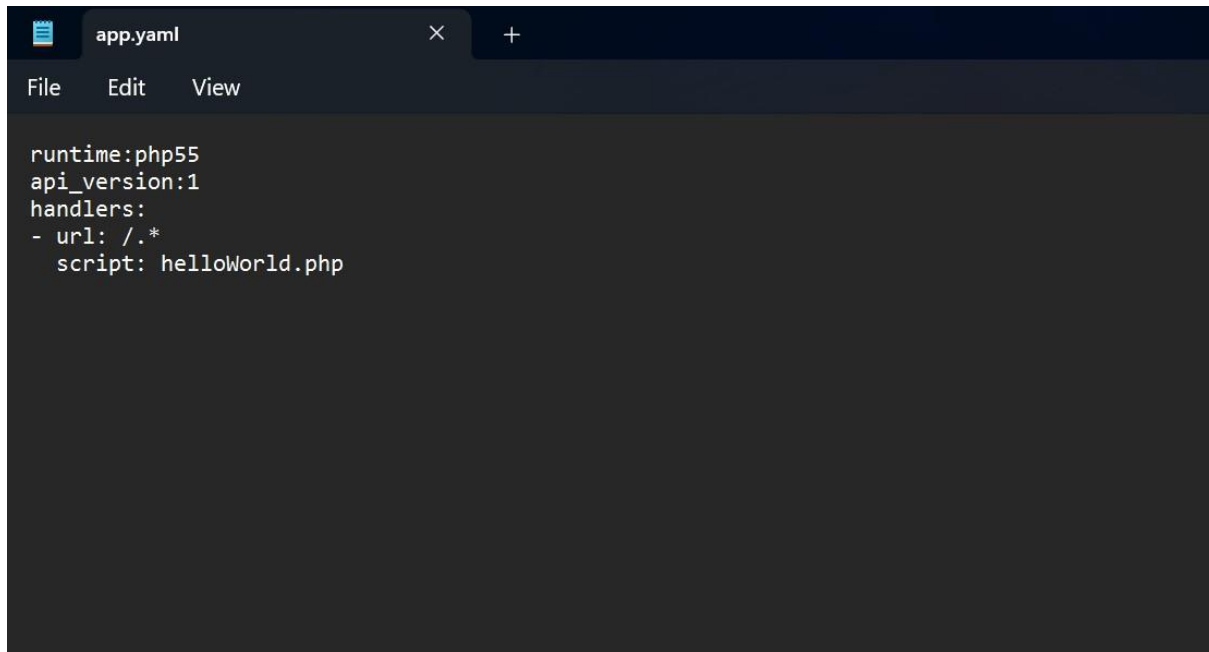2. After Google cloud creates new project as per name specified in previous step, it opens up project home, showing dashboard.
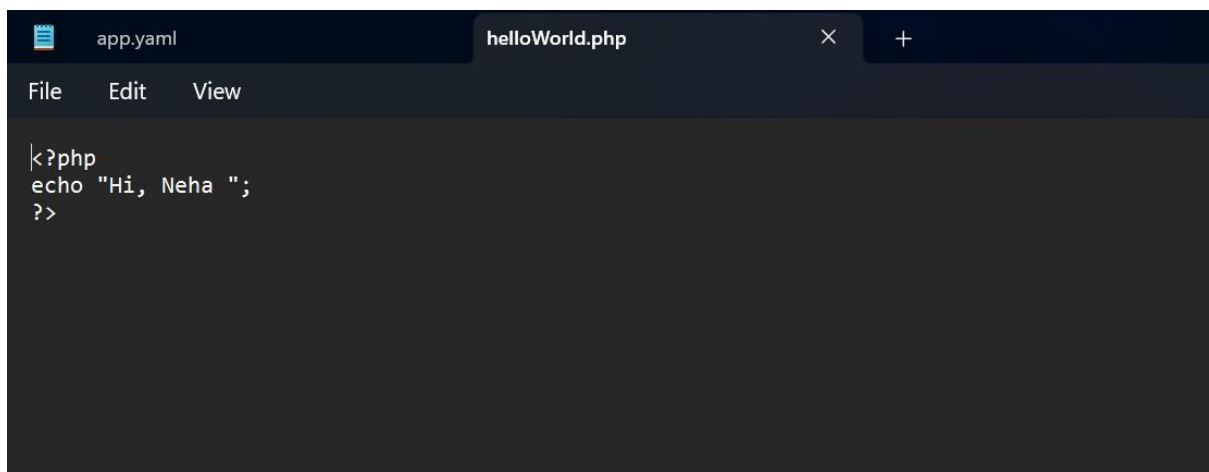
3.
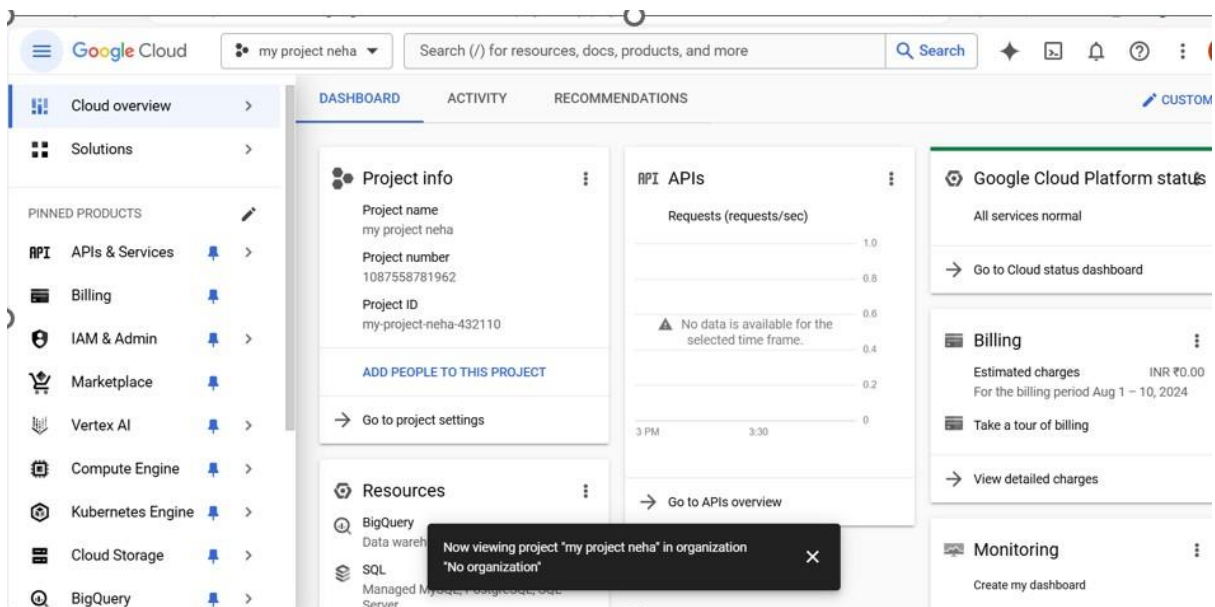
4. Create a new configuration file app.yaml. yaml file contains information about your app's code, such as the runtime and the latest version identifier. Each service in your app has its own app. yaml file, which acts as a descriptor for its deployment.

```
app.yaml                                    ×        +

File    Edit    View

runtime:php55
api_version:1
handlers:
- url: /.*
  script: helloWorld.php
```

5. Create a PHP code to upload and run and save it as "helloWorld.php"

```
app.yaml                         helloWorld.php           ×        +

File    Edit    View

<?php
echo "Hi, Neha ";
?>
```

6:In order to deploy and run the PHP code on Google cloud platform, visit https://cloud.google.com/sdk/docs to download latest Google Cloud SDK and to know how to install it.

Installing the latest gcloud CLI version (487.0.0)

★ Note: If you are behind a proxy/firewall, see the proxy settings page for more information on installation.

| Linux | Debian/Ubuntu | Red Hat/Fedora/CentOS | macOS | Windows | Chromebook |

The Google Cloud CLI works on Windows 8.1 and later and Windows Server 2012 and later.

1. Download the Google Cloud CLI installer.

Alternatively, open a PowerShell terminal and run the following PowerShell commands:

```
(New-Object Net.WebClient).DownloadFile("https://dl.google.com/dl/clou
& $env:Temp\GoogleCloudSDKInstaller.exe
```

7.open Google cloud SDK installer. It will take some time to download and install SDK from Google Server. At end of installation check Start Google Cloud SDK Shell and Run 'gcloud init' to configure the Cloud SDK.

Google Cloud CLI Setup   —   □   ✕

Completing Google Cloud CLI Setup

Google Cloud CLI has been installed on your computer.

Click Finish to close Setup.

☑ Create Start Menu shortcut

☑ Create Desktop shortcut

☑ Start Google Cloud SDK Shell

☑ Run 'gcloud init' to configure the Google Cloud CLI

< Back   Finish   Cancel
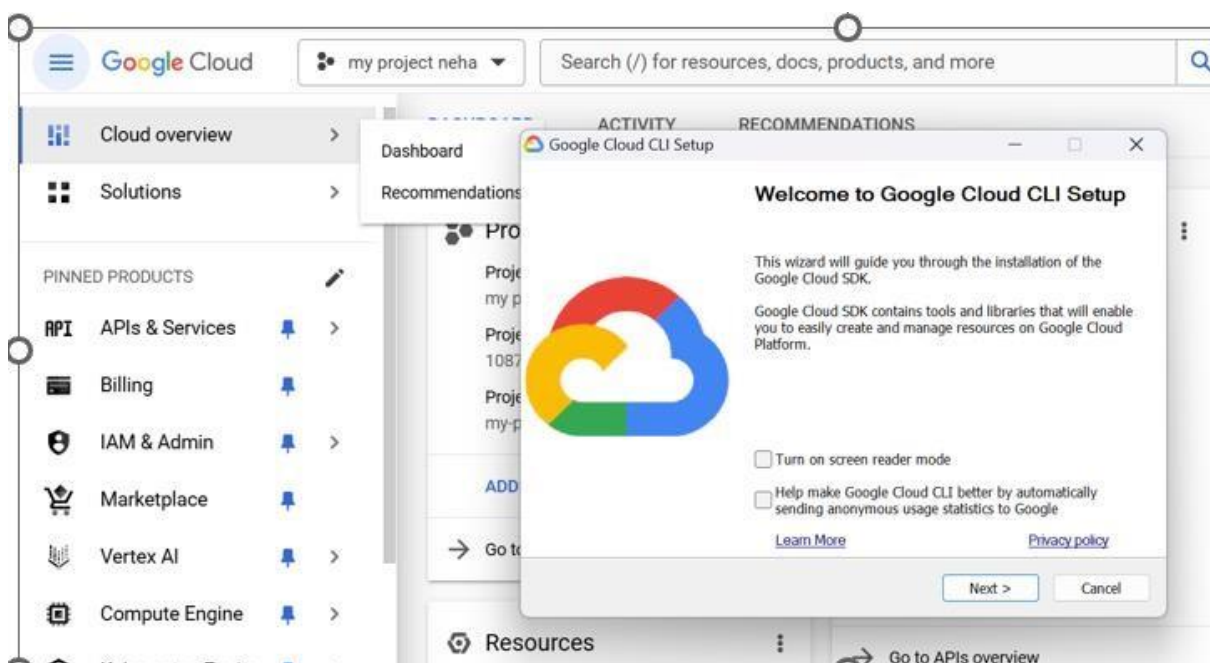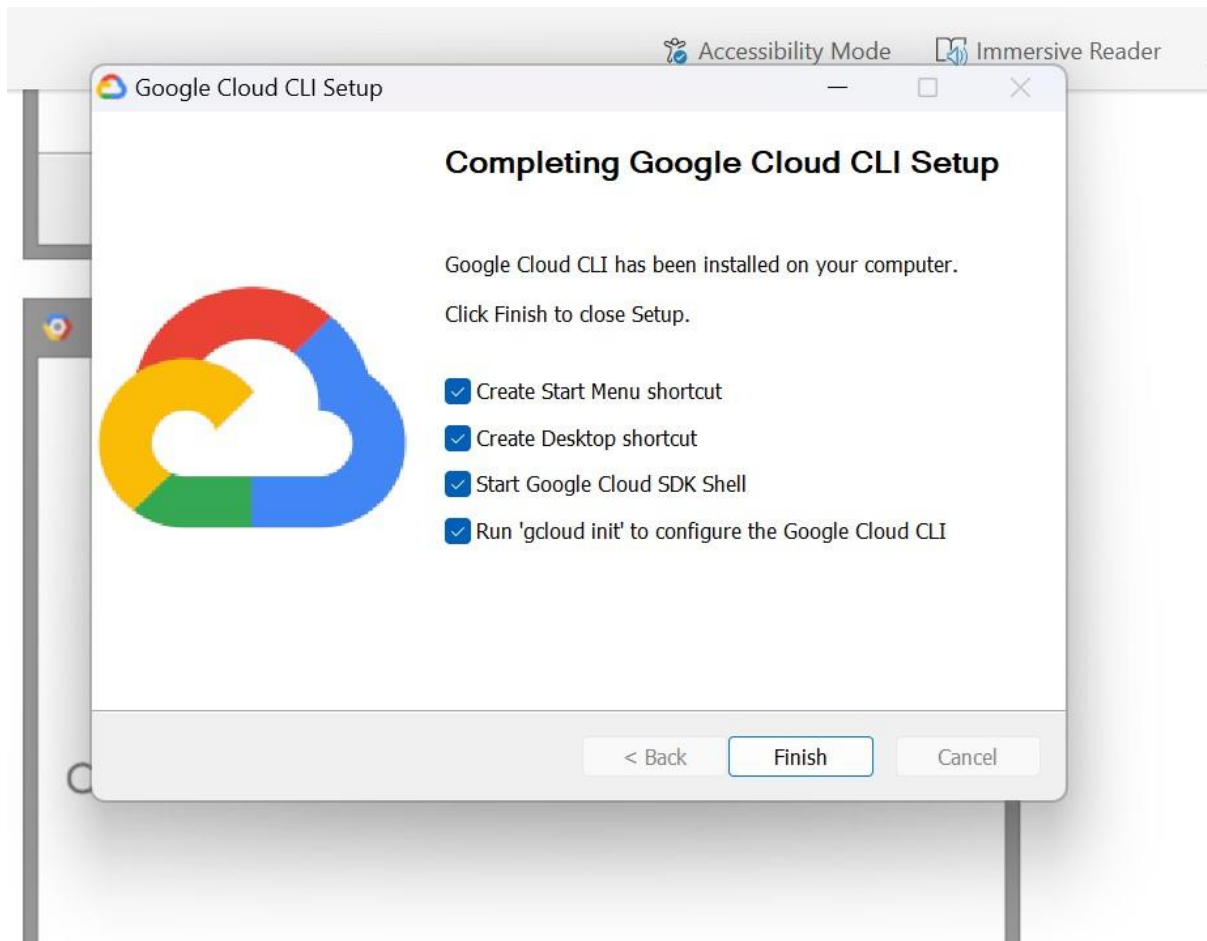
8. Previous step will open up command prompt with gcloud init
    command running automatically. It will ask you to login using
    Google account on which you have joined Google Cloud Platform.
    After successful login web browser page of cloud.google.com will
    show You are now authenticated with Google Cloud SDK.
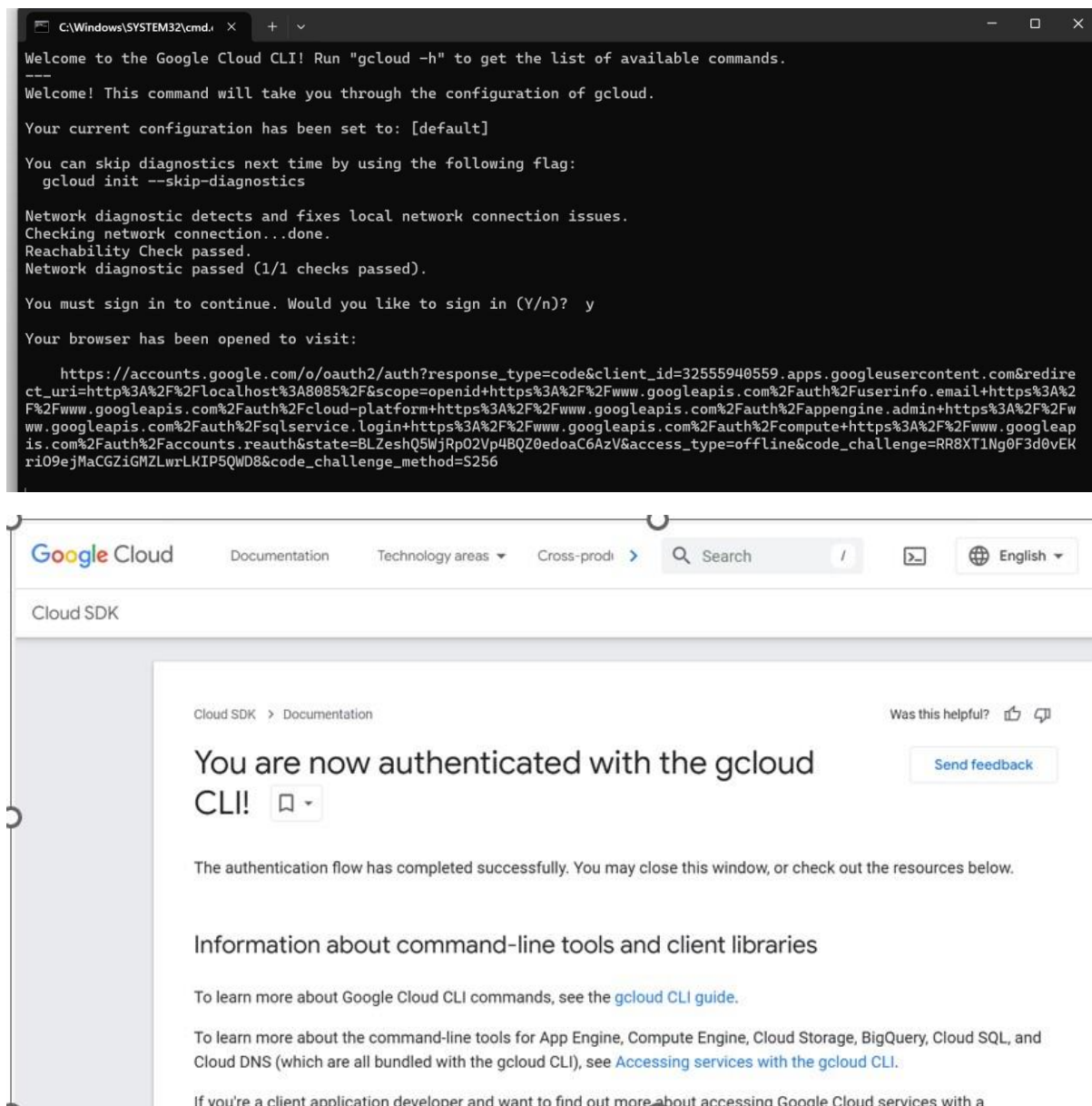
9. In command prompt, running in background will ask you to select project you want to deploy and run. Enter appropriate number and hit enter.

10. Change directory to folder where PHP and YAML file is residing.

11.Type gcloud app deploy and select region of Google Data Center where you want to deploy your app, press 5 and press Enter for asiasouth1, i.e. Mumbai. Press Y to continue with deployment. Result will show URL to launch your GoogleApp. Alternatively you can type gcloud app browse to open your App in browse

```
WARNING: Creating an App Engine application for a project is irreversible and the region
cannot be changed. More information about regions is at
<https://cloud.google.com/appengine/docs/locations>.

Please choose the region where you want your App Engine application located:

 [1] asia-east1    (supports standard and flexible)
 [2] asia-east2    (supports standard and flexible and search_api)
 [3] asia-northeast1 (supports standard and flexible and search_api)
 [4] asia-northeast2 (supports standard and flexible and search_api)
 [5] asia-northeast3 (supports standard and flexible and search_api)
 [6] asia-south1   (supports standard and flexible and search_api)
 [7] asia-southeast1 (supports standard and flexible)
 [8] asia-southeast2 (supports standard and flexible and search_api)
 [9] australia-southeast1 (supports standard and flexible and search_api)
 [10] europe-central2 (supports standard and flexible)
 [11] europe-west    (supports standard and flexible and search_api)
 [12] europe-west2   (supports standard and flexible and search_api)
 [13] europe-west3   (supports standard and flexible and search_api)
 [14] europe-west6   (supports standard and flexible and search_api)
 [15] northamerica-northeast1 (supports standard and flexible and search_api)
 [16] southamerica-east1 (supports standard and flexible and search_api)
 [17] us-central     (supports standard and flexible and search_api)
 [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:  5

Creating App Engine application in project [my-project-neha-432110] and region [asia-northeast3]....\
```

```
C:\Windows\SYSTEM32\cmd.  X    +  v                                                        —   □   X
 [11] europe-west    (supports standard and flexible and search_api)
 [12] europe-west2   (supports standard and flexible and search_api)
 [13] europe-west3   (supports standard and flexible and search_api)
 [14] europe-west6   (supports standard and flexible and search_api)
 [15] northamerica-northeast1 (supports standard and flexible and search_api)
 [16] southamerica-east1 (supports standard and flexible and search_api)
 [17] us-central     (supports standard and flexible and search_api)
 [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:  5

Creating App Engine application in project [my-project-neha-432110] and region [asia-northeast3]....done.
Services to deploy:

descriptor:              [C:\Users\Neha Mathew\app.yaml]
source:                  [C:\Users\Neha Mathew]
target project:          [my-project-neha-432110]
target service:          [default]
target version:          [20240810t163645]
target url:              [https://my-project-neha-432110.du.r.appspot.com]
target service account:  [my-project-neha-432110@appspot.gserviceaccount.com]


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

Beginning deployment of service [default]...
Created .gcloudignore file. See `gcloud topic gcloudignore` for details.
```

```
#=

Command killed by keyboard interrupt

Terminate batch job (Y/N)? y

C:\Users\Neha Mathew\AppData\Local\Google\Cloud SDK>cd..

C:\Users\Neha Mathew\AppData\Local\Google>cd Cloud SDK

C:\Users\Neha Mathew\AppData\Local\Google\Cloud SDK>cd cc

C:\Users\Neha Mathew\AppData\Local\Google\Cloud SDK\cc>gcloud app deploy
Services to deploy:

descriptor:                [C:\Users\Neha Mathew\AppData\Local\Google\Cloud SDK\cc\app.yaml]
source:                    [C:\Users\Neha Mathew\AppData\Local\Google\Cloud SDK\cc]
target project:            [my-project-neha-432110]
target service:            [default]
target version:            [20240817t140855]
target url:                [https://my-project-neha-432110.du.r.appspot.com]
target service account:    [my-project-neha-432110@appspot.gserviceaccount.com]


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

Beginning deployment of service [default]...
Created .gcloudignore file. See 'gcloud topic gcloudignore' for details.
#========================================================#
#= Uploading 2 files to Google Cloud Storage            =#
#========================================================#
File upload done.
Updating service [default]...\
```