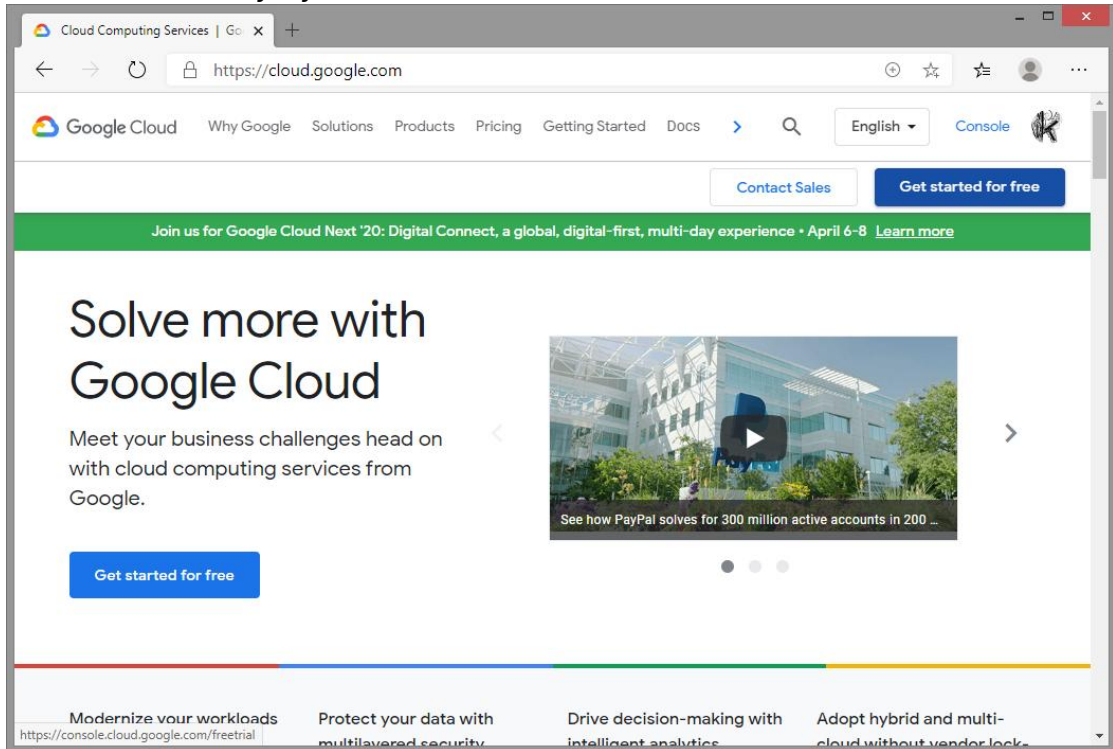
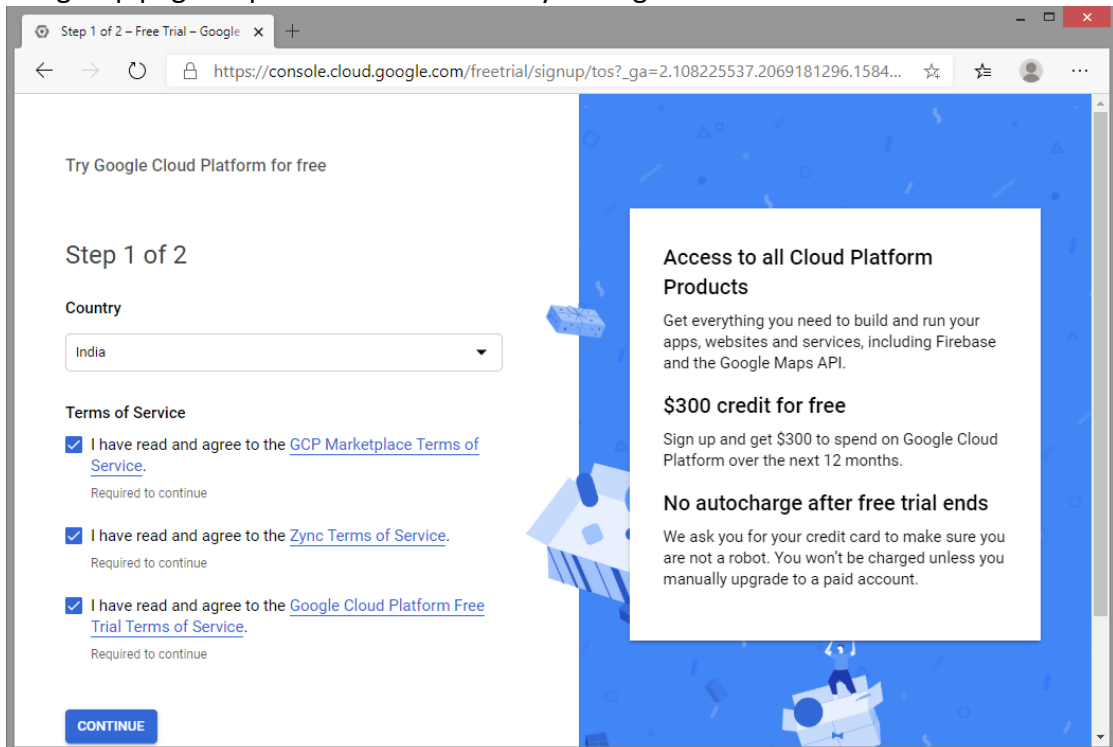


Software required: Web Browser, Python 2 or above, Google Cloud SDK.

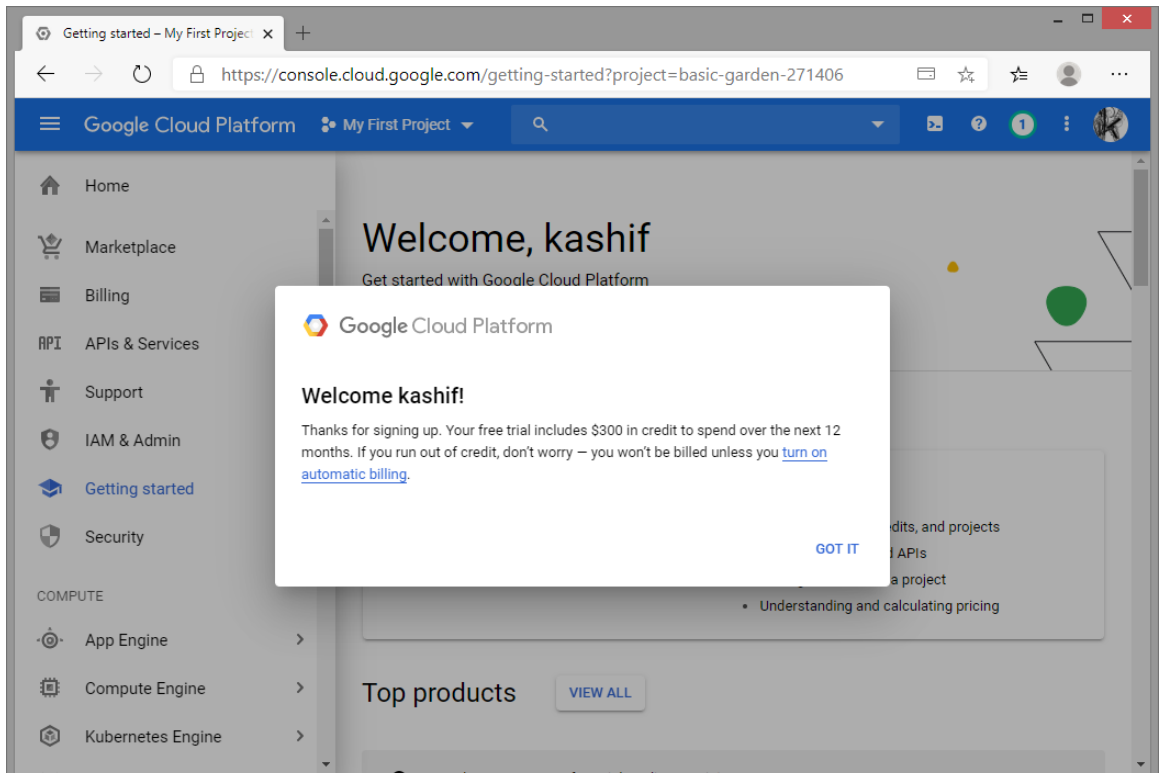
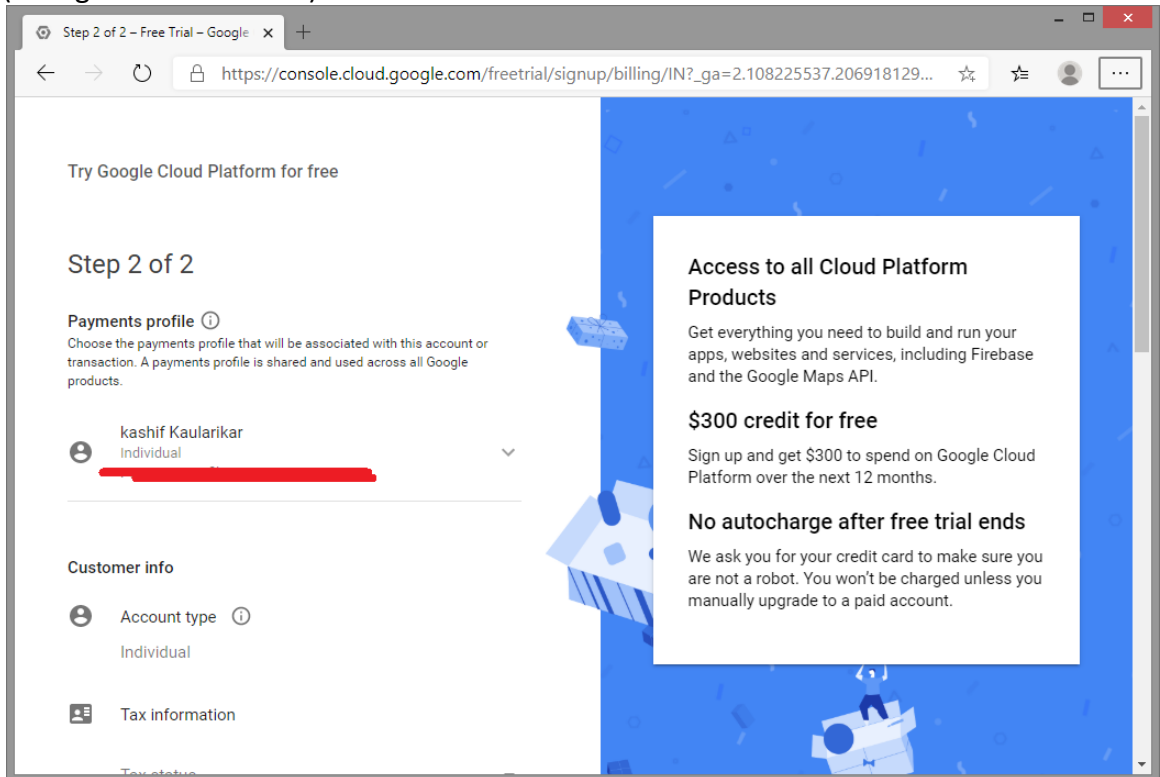
1. Create an account with Google Cloud Platform. Visit <https://cloud.google.com> and click on *Get started for free*



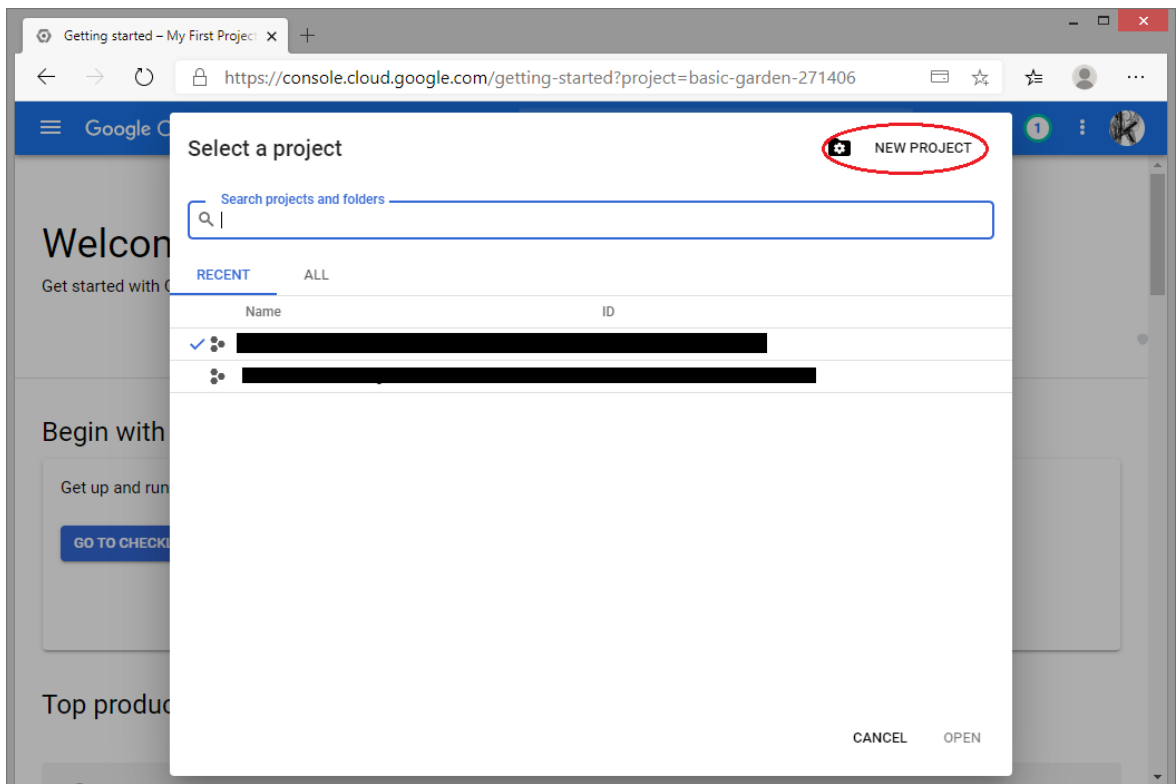
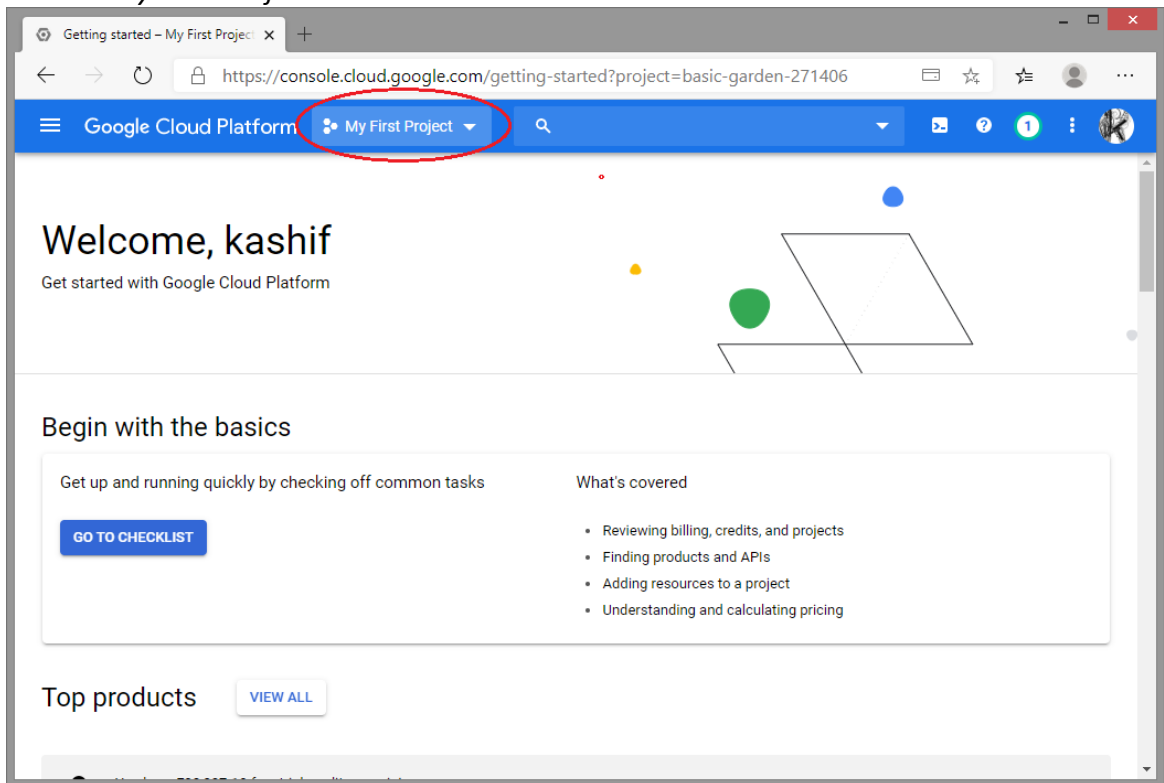
2. In Sign-up page step 1 of 2 choose country and agree to EULA.



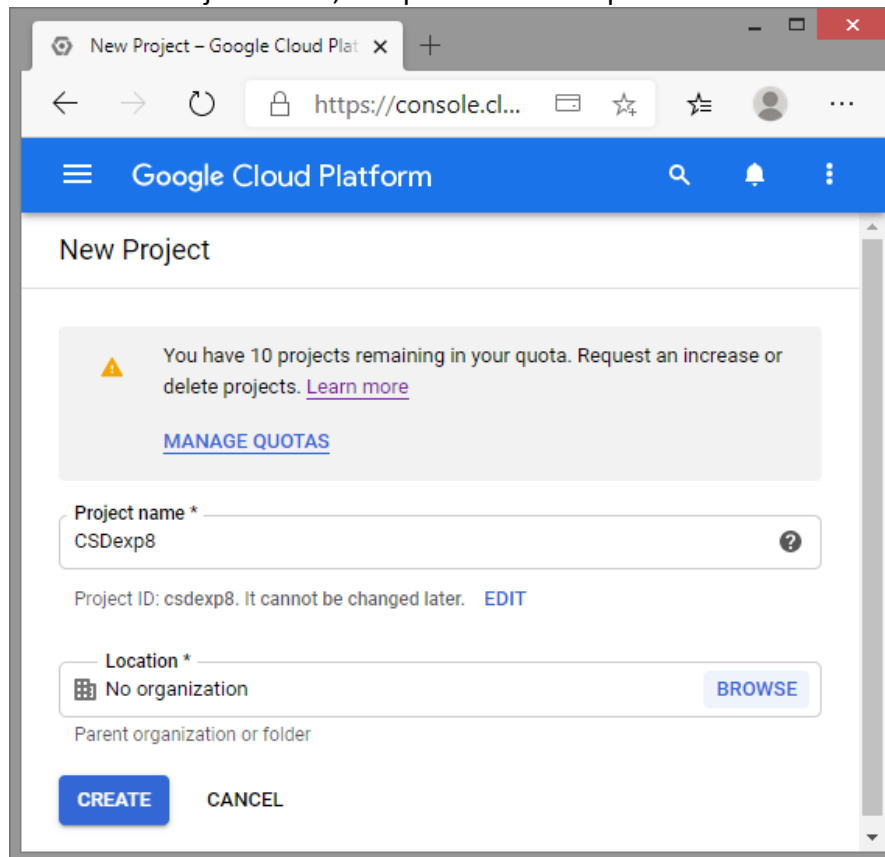
- In Sign-up page step 2 of 2 provide details for payments profile. It will charge Rs 1 to your card and refunds back, and it gives credit of \$300 for free for one year to be used for Google cloud services. Billing after one year never starts without consent (billing is not automatic).



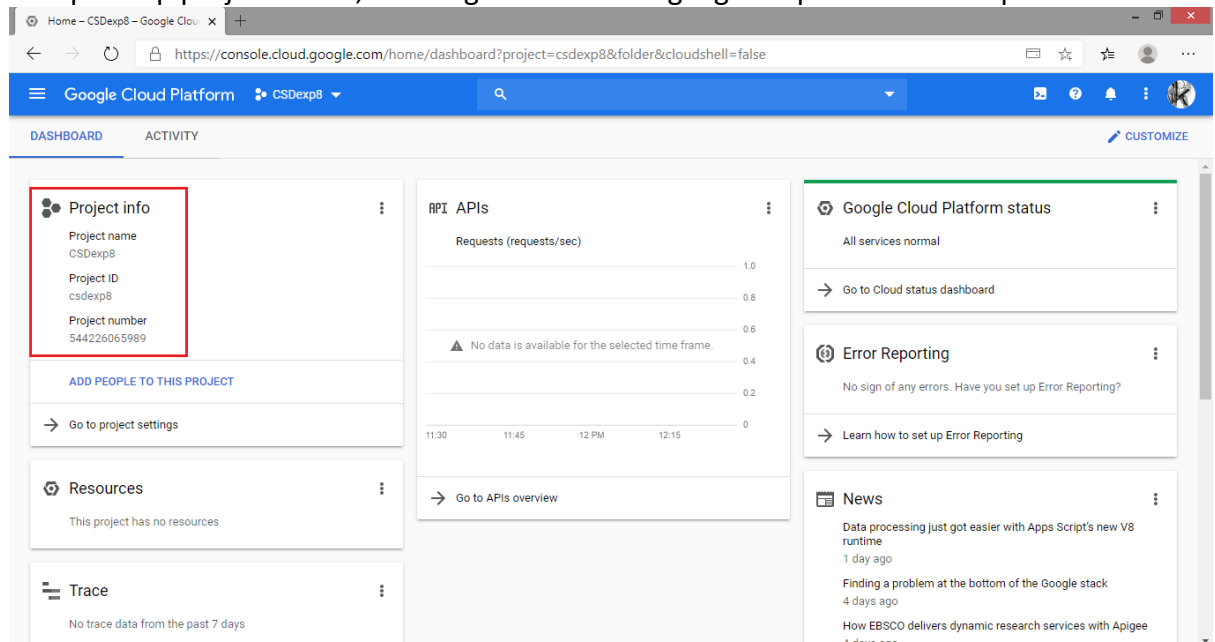
4. Click on *My First Project* and then *NEW PROJECT*.



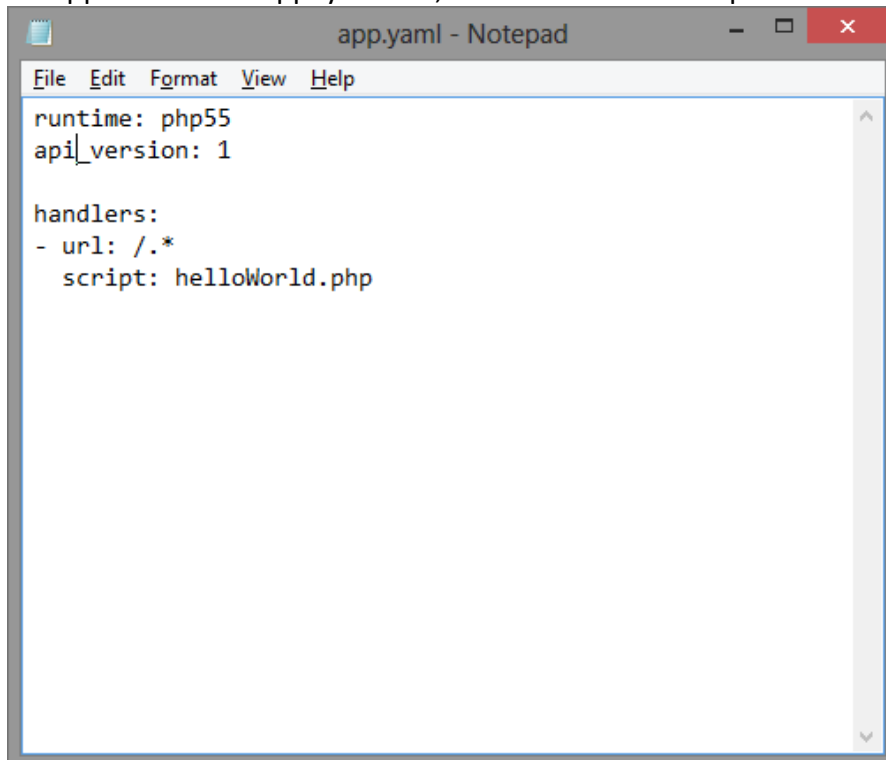
5. Provide Project name, this part will be unique. Location can be *No organization*.



6. After Google cloud creates new project as per name specified in previous step, it opens up project home, showing dashboard. Highlighted part will be unique.



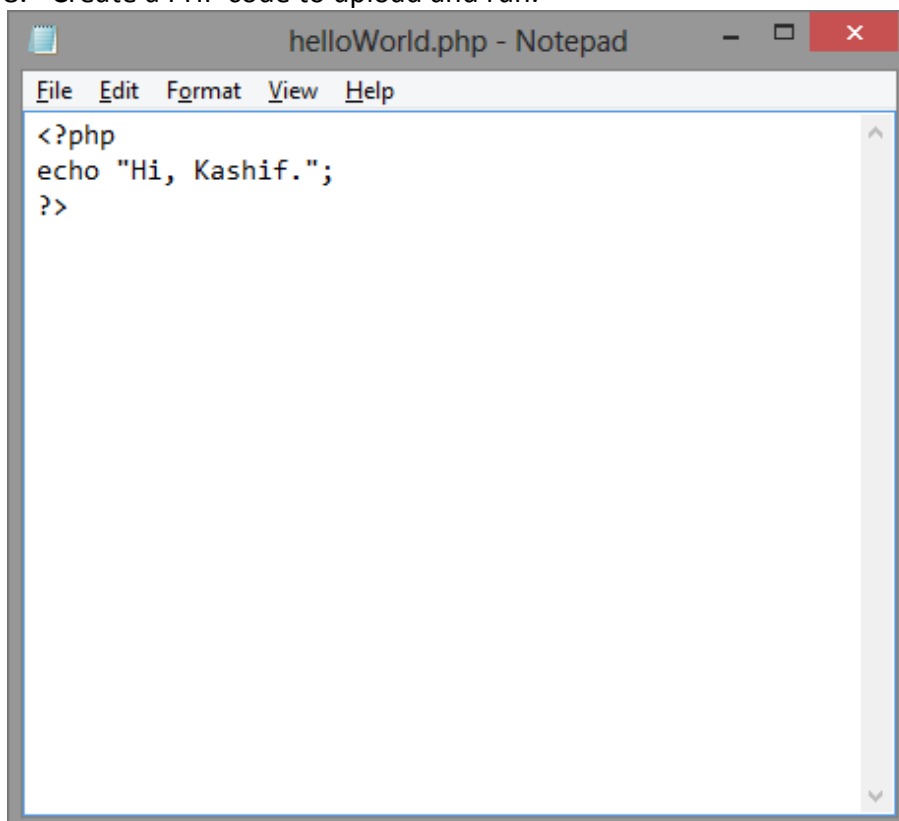
7. Create a new configuration file *app.yaml*. yaml file contains information about your app's code, such as the runtime and the latest version identifier. Each service in your app has its own *app.yaml* file, which acts as a descriptor for its deployment.



```
runtime: php55
api_version: 1

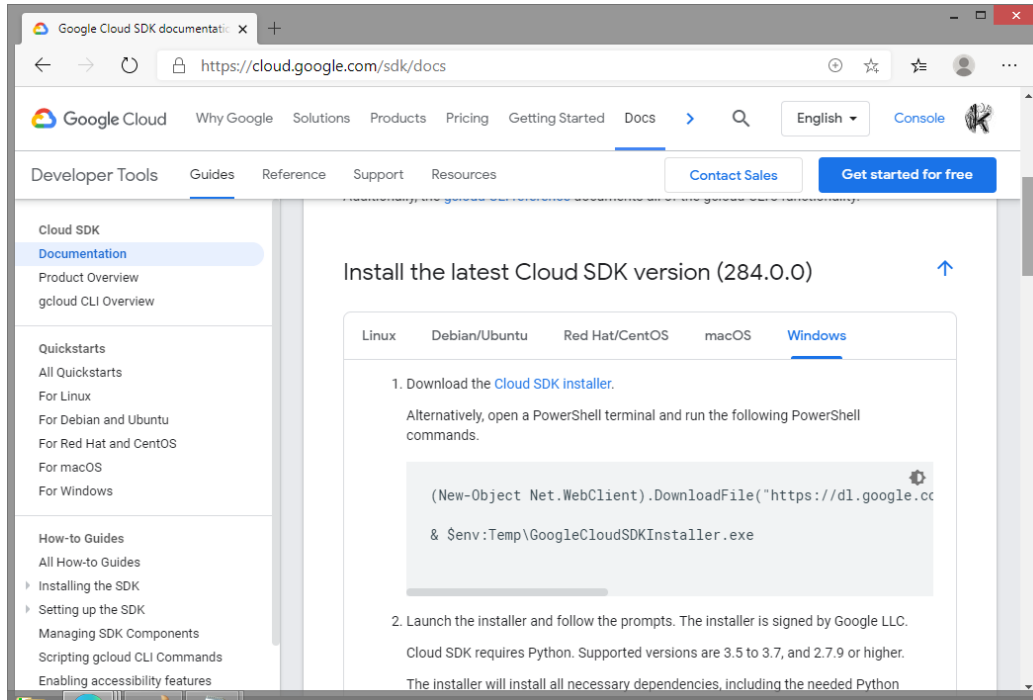
handlers:
- url: /*
  script: helloWorld.php
```

8. Create a PHP code to upload and run.

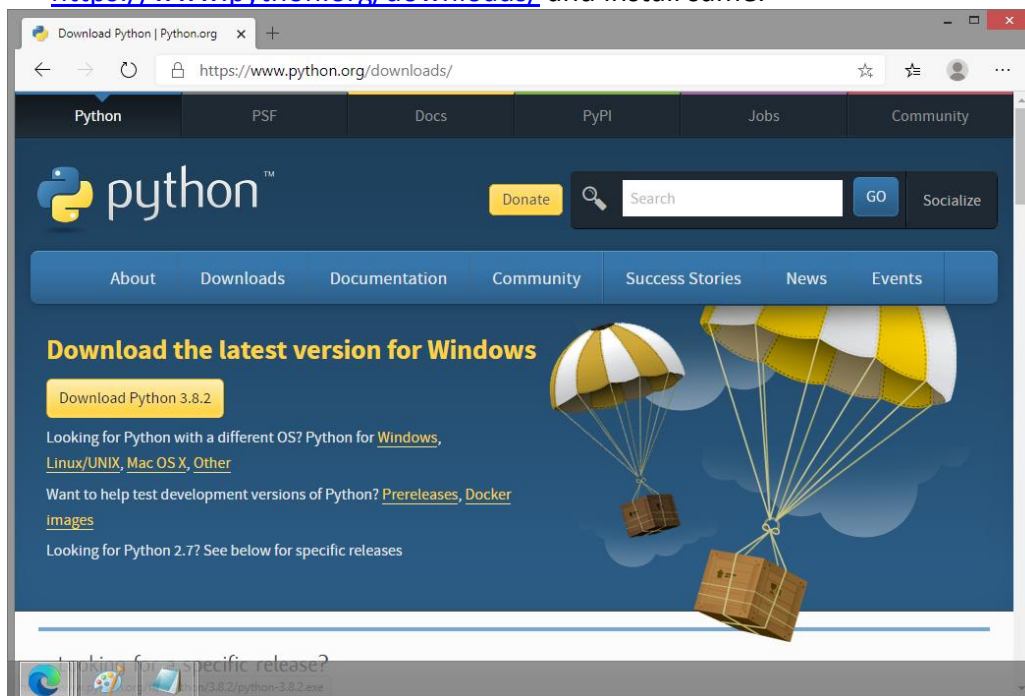


```
<?php
echo "Hi, Kashif.";
?>
```

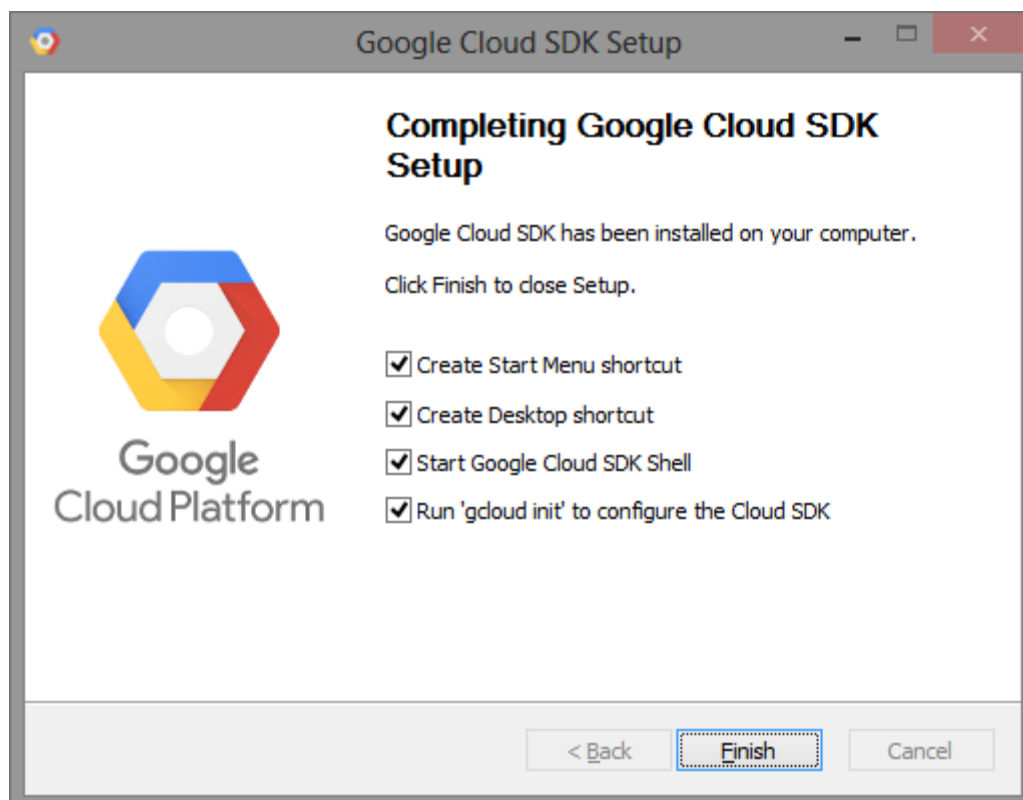
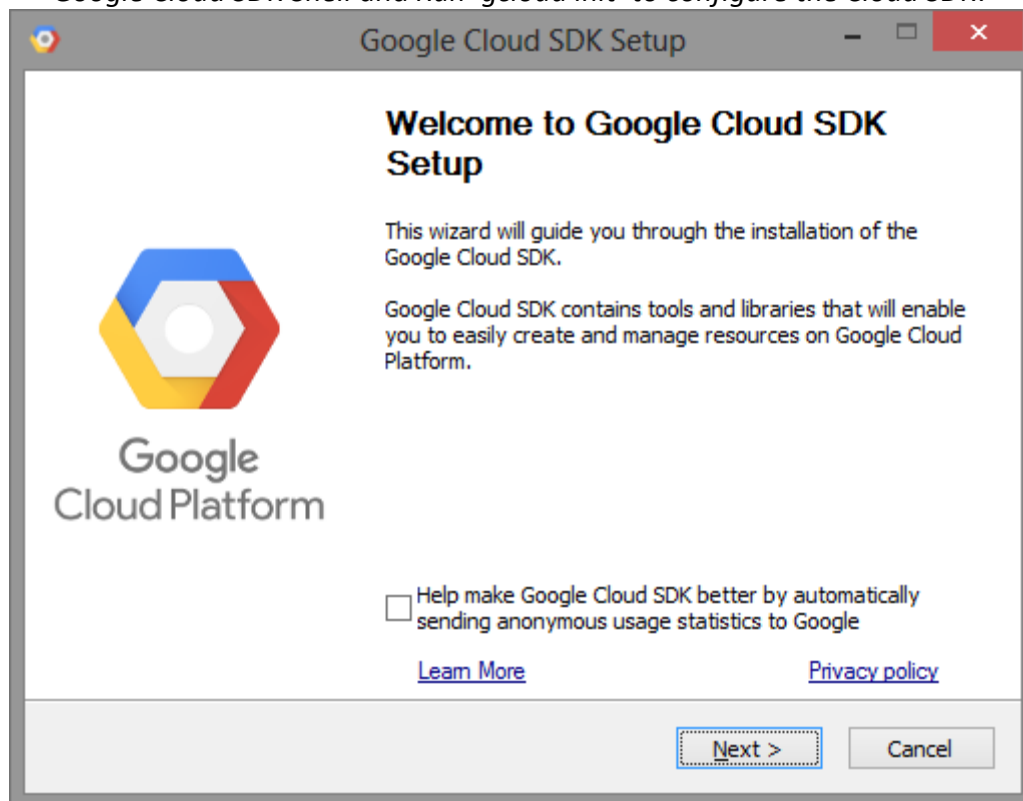
9. In order to deploy and run the PHP code on Google cloud platform, visit <https://cloud.google.com/sdk/docs> to download latest *Google Cloud SDK* and to know how to install it.



10. This SDK will also require PHP installed on machine, hence download latest PHP from <https://www.python.org/downloads/> and install same.

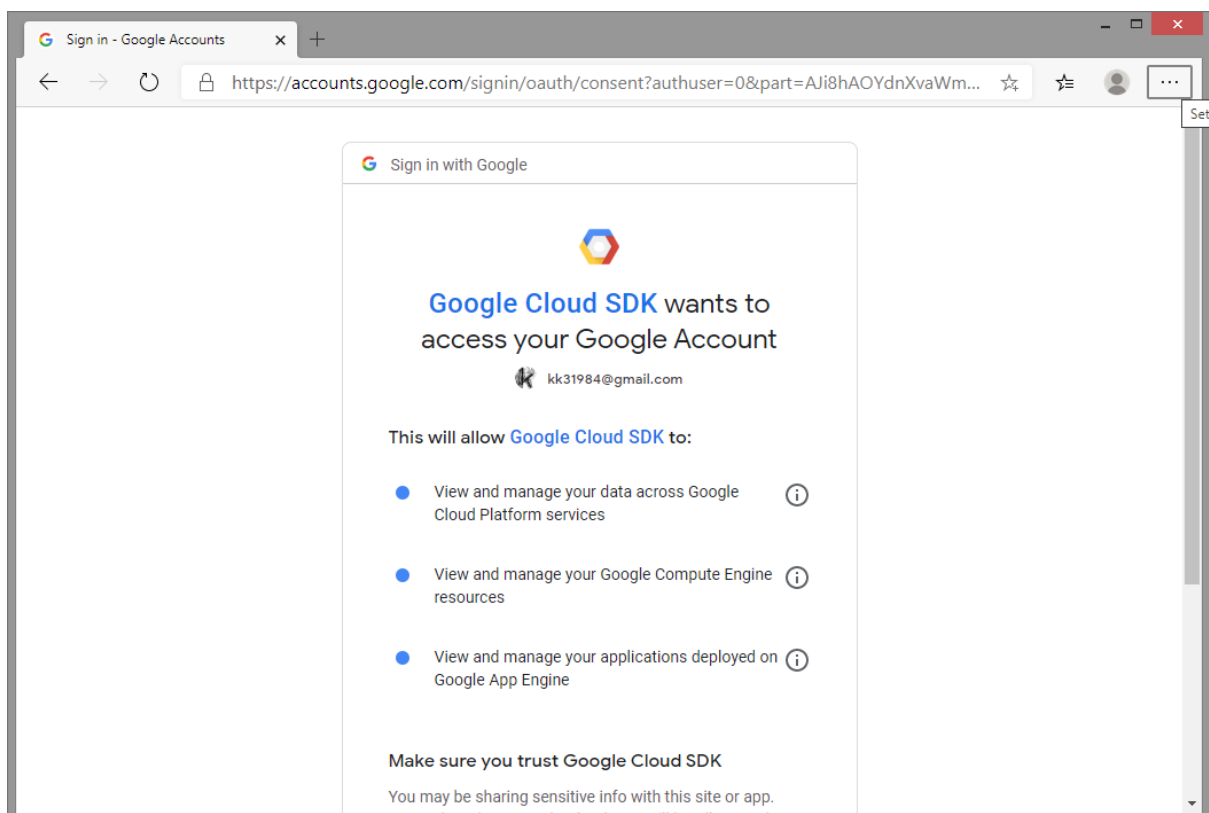


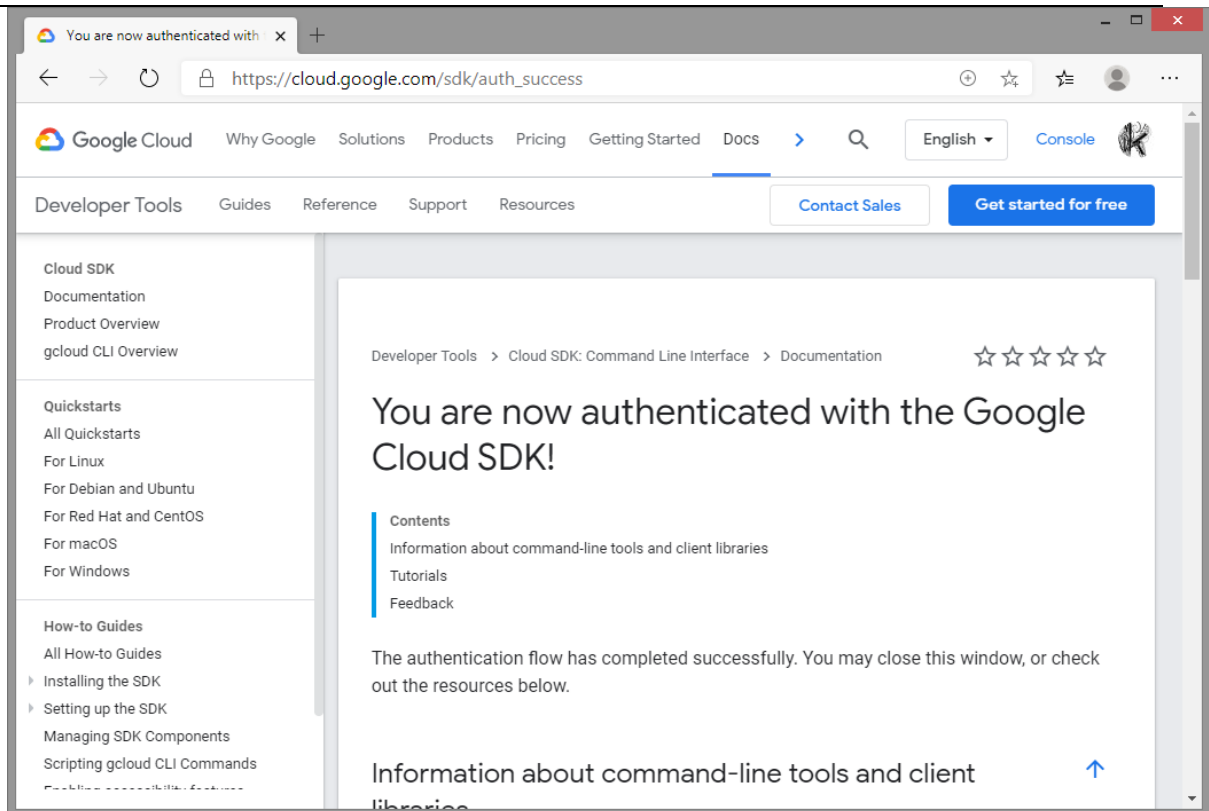
11. After installation of PHP, open Google cloud SDK installer. It will take some time to download and install *SDK from Google Server*. At end of installation check *Start Google Cloud SDK Shell* and Run *'gcloud init'* to configure the Cloud SDK.



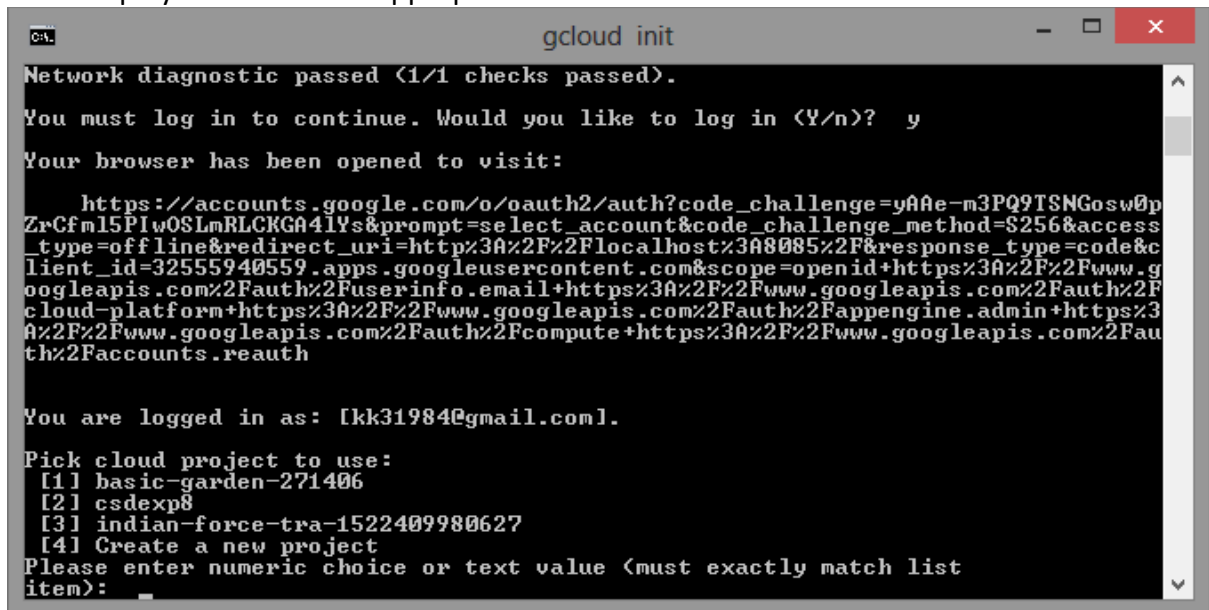
12. Previous step will open up command prompt with `gcloud init` command running automatically. It will ask you to login using Google account on which you have joined Google Cloud Platform. After successful login web browser page of `cloud.google.com` will show *You are now authenticated with Google Cloud SDK*.

```
gcloud init
Your current configuration has been set to: [default]
You can skip diagnostics next time by using the following flag:
  gcloud init --skip-diagnostics
Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).
You must log in to continue. Would you like to log in (Y/n)? y
Your browser has been opened to visit:
  https://accounts.google.com/o/oauth2/auth?code_challenge=yAAe-m3PQ9TISNGosw0p
ZrCfm15P1wOSLmRLCKGA41Ys&prompt=select_account&code_challenge_method=S256&access
_type=offline&redirect_uri=http%3A%2F%2Flocalhost%3A8085%2F&response_type=code&c
lient_id=32555940559.apps.googleusercontent.com&scope=openid+https%3A%2F%2Fwww.g
oogleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2F
cloud-platform+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fappengine.admin+https%3
A%2F%2Fwww.googleapis.com%2Fauth%2Fcompute+https%3A%2F%2Fwww.googleapis.com%2Fau
th%2Faccounts.reauth
```

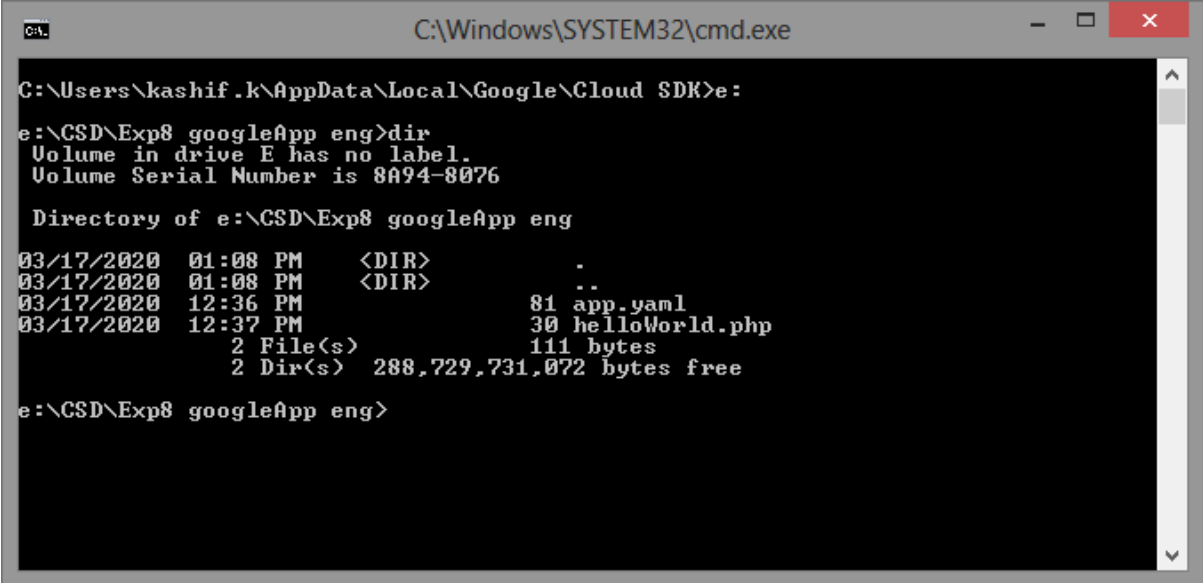




13. In command prompt, running in background will ask you to select project you want to deploy and run. Enter appropriate number and hit *enter*.



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



```
C:\Windows\SYSTEM32\cmd.exe

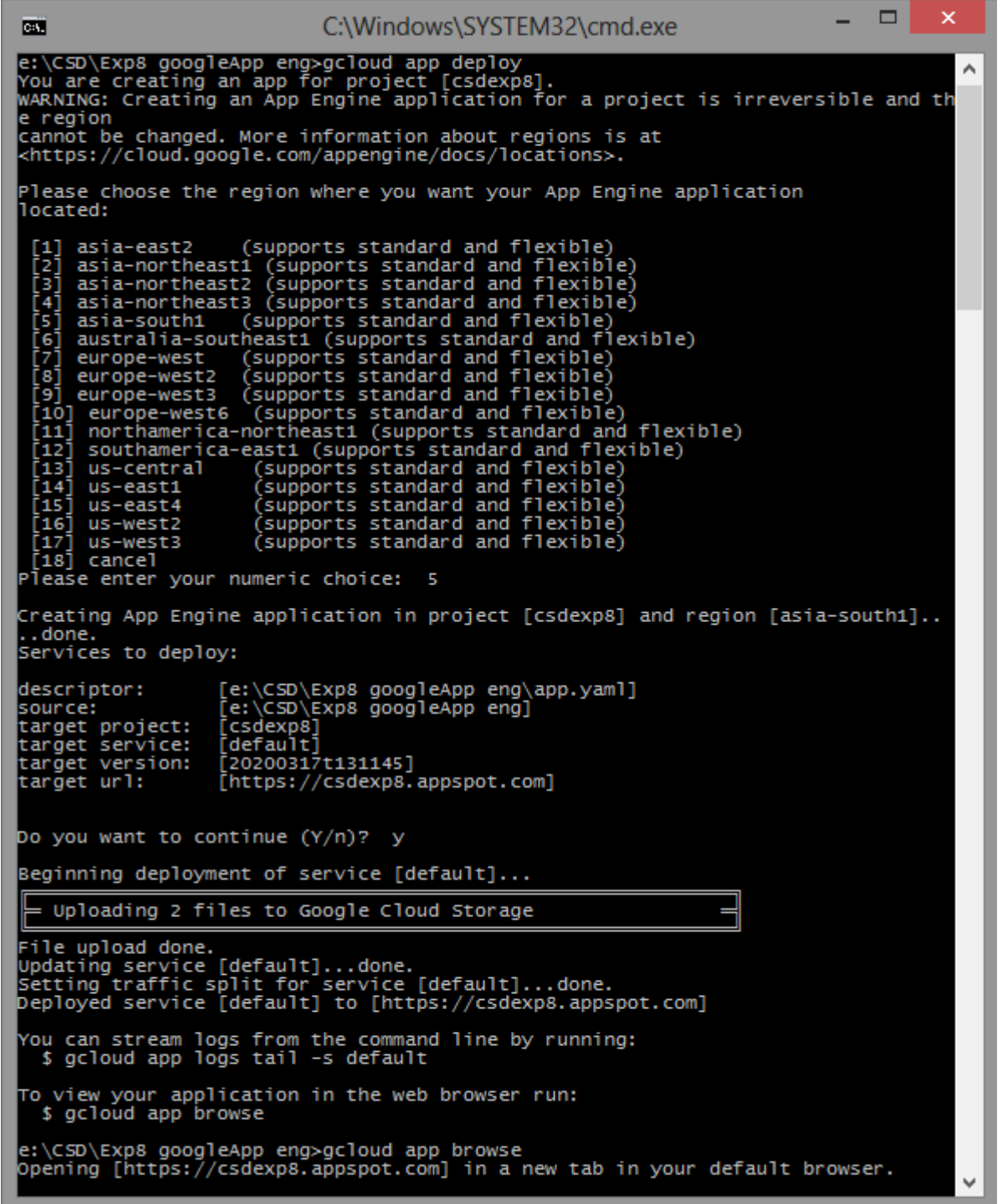
C:\Users\kashif.k\AppData\Local\Google\Cloud SDK>e:
e:\CSD\Exp8 googleApp eng>dir
Volume in drive E has no label.
Volume Serial Number is 8A94-8076

Directory of e:\CSD\Exp8 googleApp eng

03/17/2020  01:08 PM    <DIR>          .
03/17/2020  01:08 PM    <DIR>          ..
03/17/2020  12:36 PM                81 app.yaml
03/17/2020  12:37 PM                30 helloWorld.php
                2 File(s)      111 bytes
                2 Dir(s)  288,729,731,072 bytes free

e:\CSD\Exp8 googleApp eng>
```

15. Type `gcloud app deploy` and select region of Google Data Center where you want to deploy your app, press `5` and press `Enter` for `asia-south1`, 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 browser. Further you can make change in PHP code, or add more PHP code and repeat step 15.



```
C:\Windows\SYSTEM32\cmd.exe
e:\CSD\Exp8 googleApp eng>gcloud app deploy
You are creating an app for project [csdexp8].
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-east2 (supports standard and flexible)
[2] asia-northeast1 (supports standard and flexible)
[3] asia-northeast2 (supports standard and flexible)
[4] asia-northeast3 (supports standard and flexible)
[5] asia-south1 (supports standard and flexible)
[6] australia-southeast1 (supports standard and flexible)
[7] europe-west (supports standard and flexible)
[8] europe-west2 (supports standard and flexible)
[9] europe-west3 (supports standard and flexible)
[10] europe-west6 (supports standard and flexible)
[11] northamerica-northeast1 (supports standard and flexible)
[12] southamerica-east1 (supports standard and flexible)
[13] us-central (supports standard and flexible)
[14] us-east1 (supports standard and flexible)
[15] us-east4 (supports standard and flexible)
[16] us-west2 (supports standard and flexible)
[17] us-west3 (supports standard and flexible)
[18] cancel
Please enter your numeric choice: 5

Creating App Engine application in project [csdexp8] and region [asia-south1]..
..done.
Services to deploy:

descriptor: [e:\CSD\Exp8 googleApp eng\app.yaml]
source: [e:\CSD\Exp8 googleApp eng]
target project: [csdexp8]
target service: [default]
target version: [20200317t131145]
target url: [https://csdexp8.appspot.com]

Do you want to continue (Y/n)? y
Beginning deployment of service [default]...

= Uploading 2 files to Google Cloud Storage =

File upload done.
Updating service [default]...done.
Setting traffic split for service [default]...done.
Deployed service [default] to [https://csdexp8.appspot.com]

You can stream logs from the command line by running:
$ gcloud app logs tail -s default

To view your application in the web browser run:
$ gcloud app browse

e:\CSD\Exp8 googleApp eng>gcloud app browse
Opening [https://csdexp8.appspot.com] in a new tab in your default browser.
```

