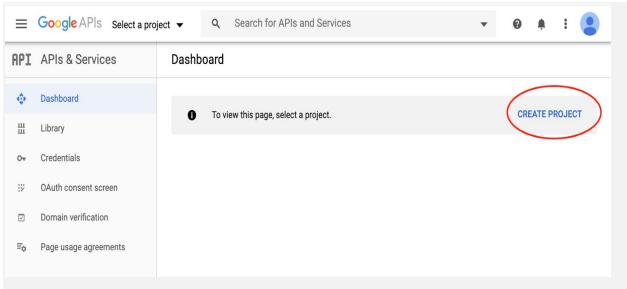
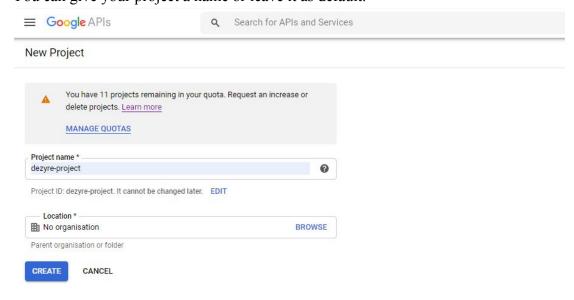
## Get Authentication for Google Service API

First, we need to get the authentication files for Google Service API, so our Python code can access Google Drive. To do that, we need to:

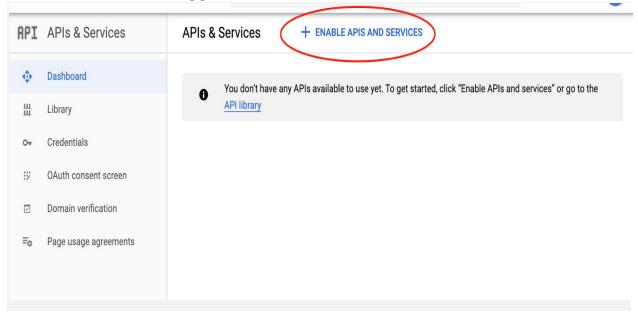
1. Create a new project in <u>Google Developer Console</u> by clicking "CREATE PROJECT" as follows.



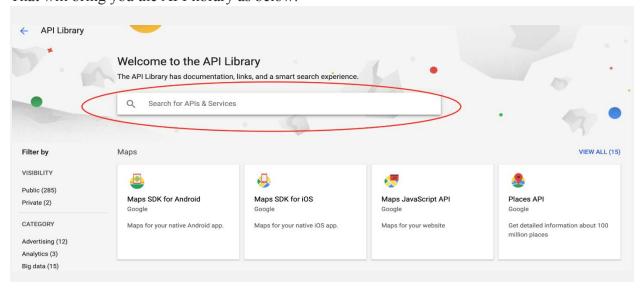
You can give your project a name or leave it as default.



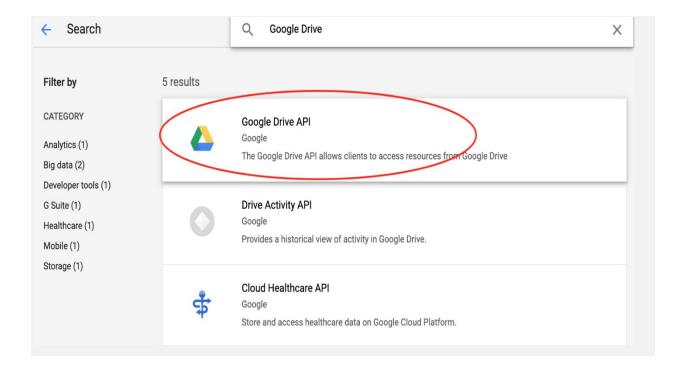
2. Enable APIs and Services by clicking the "ENABLE APIS AND SERVICES" as indicated by the red circle in the following picture.



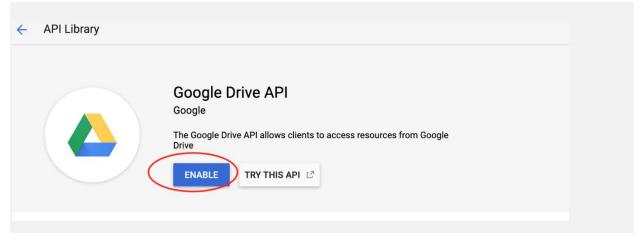
That will bring you the API library as below.



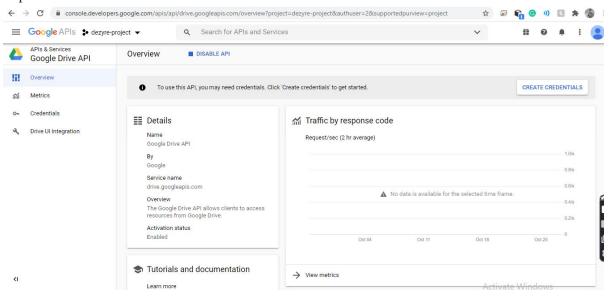
Search "Google Drive" in the API library (indicated by the red circle in the picture). You'll get the following snapshot.



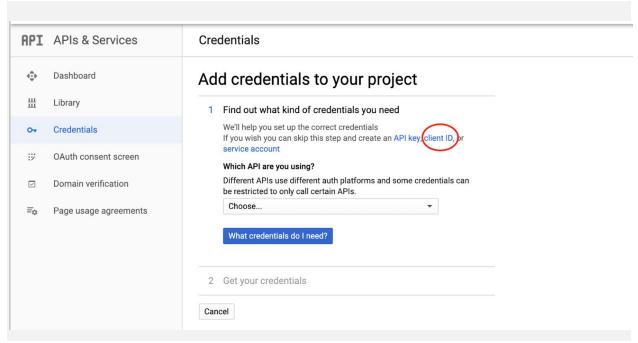
Click the "Google Drive API" icon and it will bring you to the next step as follows.



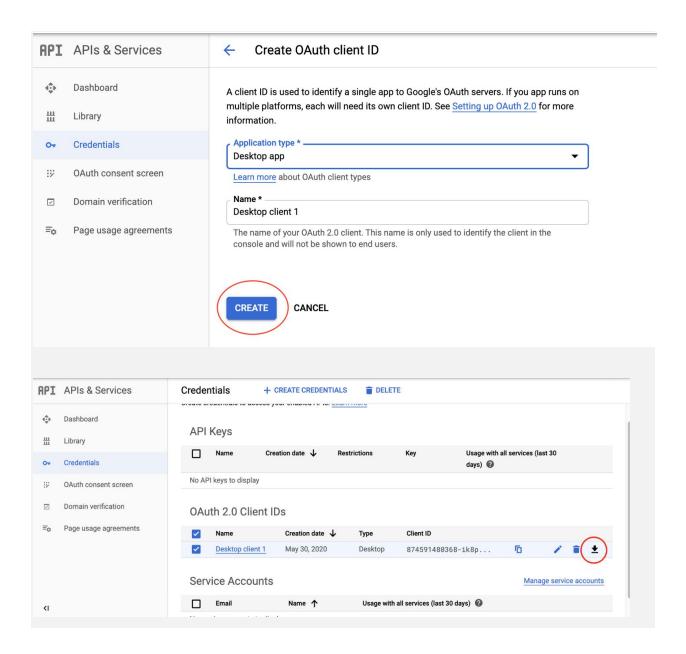
Then click "ENABLE", which will enable your Google Drive API service. You'll get to the next step as follows.



3. Create credentials by clicking the "CREATE CREDENTIALS" icon (indicated by red circle in above snapshot). Here's what you'll get.



In the above snapshot, we need to click "client ID" as that's the Python program needs. Then click "CREATE" and download the JSON file as shown by the following snapshots.



The downloaded JSON file is the one we need for our Python code to access Google Drive.

## **Install PyDrive Module:**

Once you have the JSON file to access Google Drive, we can install a Python library

— <u>PyDrive</u> using pip install pydrive.

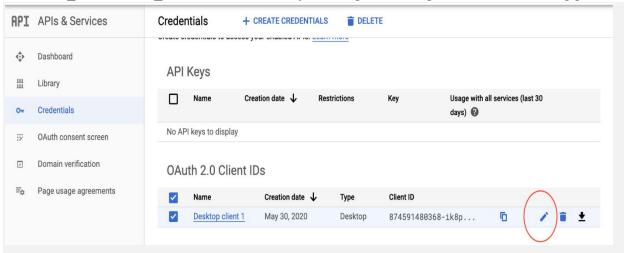
The google authentication code will do authentication and list all files in your Google Drive. Note that every time you run the following program, the code will open a web browser to ask you to input your Google account and password.

To avoid inputting passwords every time, we can create a settings.yaml file to save all the credentials. The details can be found from the <u>PyDrive official document</u>. The yaml file is like the following.

## settings.yml file:

```
client_config_backend: settings
client_config:
   client_id: your_client_id
   client_secret: your_client_secretsave_credentials: True
save_credentials_backend: file
save_credentials_file: credentials.jsonget_refresh_token: Trueoauth_scope:
   - https://www.googleapis.com/auth/drive.file
```

The client id and client secret can be found by clicking the editing icon in the following picture.



Rerun the above Python code, the program will ask you to input your Google password again. Then it will create a credentials.json file. Next time, Python will just pick up that file to finish authentication automatically. Therefore, you don't need to type your password again.