

Mustafa Coşkun Hw1 explain your reason to choose the video

```
from IPython.display import HTML
##find a vidoe in Youtube click on Share and then Embedd and copy the code
URL='<iframe width="560" height="315" src="https://www.youtube.com/embed/m
HTML(URL)
```

```
/opt/python/envs/default/lib/python3.8/site-packages/IPython/core/display
warnings.warn("Consider using IPython.display.IFrame instead")
```

open <https://cloud.google.com/> after signing in search on top "youtube data api v3" and click the first one click on enable (if any agrrement appears clikc agree) click on Credentials and create credential and copy apikey

```
#this is for installing googleapiclients
!pip install google-api-python-client
```

```
Collecting google-api-python-client
  Downloading google_api_python_client-2.102.0-py2.py3-none-any.whl (12
    12.4/12.4 MB 57.7 MB/s etc
Collecting httplib2<1.dev0,>=0.15.0 (from google-api-python-client)
  Downloading httplib2-0.22.0-py3-none-any.whl (96 kB)
    96.9/96.9 kB 14.1 MB/s etc
Requirement already satisfied: google-auth<3.0.0.dev0,>=1.19.0 in /opt/p
Collecting google-auth-httplib2>=0.1.0 (from google-api-python-client)
  Downloading google_auth_httplib2-0.1.1-py2.py3-none-any.whl (9.3 kB)
Collecting google-api-core!=2.0.*,!=2.1.*,!=2.2.*,!=2.3.0,<3.0.0.dev0,>=
  Downloading google_api_core-2.12.0-py3-none-any.whl (121 kB)
    121.4/121.4 kB 23.0 MB/s etc
```

```
Collecting uritemplate<5,>=3.0.1 (from google-api-python-client)
  Downloading uritemplate-4.1.1-py2.py3-none-any.whl (10 kB)
Collecting googleapis-common-protos<2.0.dev0,>=1.56.2 (from google-api-c
  Downloading googleapis_common_protos-1.60.0-py2.py3-none-any.whl (227
    227.6/227.6 kB 11.2 MB/s etc
Requirement already satisfied: protobuf!=3.20.0,!<3.20.1,!<4.21.0,!<4.2
Requirement already satisfied: requests<3.0.0.dev0,>=2.18.0 in /opt/pyth
Requirement already satisfied: cachetools<6.0,>=2.0.0 in /opt/python/env
```

*#this is for only 100 results try the next code block for more than 100*

```
import googleapiclient.discovery
api_service_name="youtube"
api_version="v3"
DEVELOPER_KEY="AIzaSyDdBZUj-Cb7Y2x1L56J4DUvWnDTzgGHjXk" #plase use your ow
youtube = googleapiclient.discovery.build(api_service_name,api_version,dev
comments = youtube.commentThreads().list(
    part="snippet",
    videoId="mEBU0QkhYNI", #please paste here your video's id
    maxResults=100
).execute()
for item in comments['items']:
    print(item["snippet"]["topLevelComment"]["snippet"]["textDisplay"])
```

The country has always been way more expensive like years and years wor  
Have you been to Switzerland? It's way more expensive there.  
was breaking a piece of toblerone every time really necessary? because  
It surprises me why everybody gets really worked up about inflation and  
It's hard to predict the future until we see this month's inflation  
Many elite live in Switzerland  
America needs to start drilling oil again and all this will end not to b  
SWISS ROCKS!!!!!!!!!!!!!!!!!!!! SIGH!! And they are peaceful.  
In light of the impending recession and the fact that inflation is still  
They bankrupt creditsuisse  
Swis bank  
Outsiders see the situation and they think that "this is a country  
Inflation hits people a lot harder than a crashing stock or housing mar  
I appreciate the idea of a small government and low taxes, but sometime  
Я из России, у нас тоже тяжело, если нет финансовой подушки  
I wanna move here  
Since Switzerland doing Russia sanctions and freezing Russian's mo  
Awesome content.  
Holocaust victims money helps  
I'm from Canada 🇨🇦 <br>Ever since I met Mrs Sophia I'm now liv

```

import googleapiclient.discovery
import pandas as pd

api_service_name = "youtube"
api_version = "v3"
DEVELOPER_KEY = "AIzaSyBlqLpwYPi9xIx7NmC4avt8AJu0BfZSaQg" #plase use your

youtube = googleapiclient.discovery.build(
    api_service_name, api_version, developerKey=DEVELOPER_KEY)

response = youtube.commentThreads().list(
    part="snippet,replies",
    videoId="mEBU0QkhYNI", #paste your chosen video's id here
    maxResults=100
).execute()

comments = []
while response:
    for item in response['items']:
        comment = item['snippet']['topLevelComment']['snippet']
        comments.append([
            comment['publishedAt'],
            comment['updatedAt'],
            comment['likeCount'],
            comment['textDisplay'],
            ''
        ])
    if 'nextPageToken' in response:
        response = youtube.commentThreads().list(
            part="snippet",
            videoId="mEBU0QkhYNI", #paste your video id here
            maxResults=100,
            pageToken=response['nextPageToken']
        ).execute()
    else:
        break

df = pd.DataFrame(comments, columns=['published_at', 'updated_at', 'like_c
df

```

	published_at	updated_at	like_count	text	sentiment
0	2023-10-05T08:58:22Z	2023-10-05T08:58:22Z	0	The country has always been way more expensive...	
1	2023-10-03T15:06:47Z	2023-10-03T15:06:47Z	0	Have you been to Switzerland? It's way mor...	
2	2023-10-02T11:13:39Z	2023-10-02T11:13:39Z	0	was breaking a piece of toblerone every time r...	
3	2023-09-30T12:40:34Z	2023-09-30T12:40:34Z	1491	It surprises me why everybody gets really work...	
4	2023-09-28T17:53:46Z	2023-09-28T17:53:46Z	153	It's hard to predict the future until we s...	
...	...	...	...	...	...
1624	2023-02-27T10:13:32Z	2023-02-27T10:13:32Z	5	I guess the Swiss should be renamed to Bruce W...	
1625	2023-02-27T10:11:50Z	2023-02-27T10:11:50Z	322	What's the greatest thing about Switzerlan...	
1626	2023-02-27T10:06:47Z	2023-02-27T10:09:03Z	38	<a href="https://www.youtube.com/watch?v=mEBU0...	
1627	2023-02-27T10:05:16Z	2023-02-27T10:05:16Z	76	I'm proud of my home country! 🇨🇭	
1628	2023-02-27T10:04:05Z	2023-02-27T10:04:05Z	6	You forgot to mention China which has below 3%...	

1629 rows × 5 columns

SO WE COLLECTED YOUTUBE COMMENTS OF OUR VIDEO NEXT WEEK WE ARE WILL DO LEXICON BASED SENTIMENT ANALYSIS THUS YOU WILL BE ASSIGNED FOR YOUR HOMEWORK NEXT WEEK. (WE JUST POSTPONED IT)