

→ Google Drive

```
from google.colab import drive
drive.mount('/content/gdrive/')

Drive already mounted at /content/gdrive/; to attempt to forcibly remount, call drive.mount("/content/gdrive/", force_remount=T

cd /content/gdrive/MyDrive/19CSE453_NLP

/content/gdrive/MyDrive/19CSE453_NLP
```

Secret Keys



Install and import tweepy

```
!pip install -U tweepy

Requirement already satisfied: tweepy in /usr/local/lib/python3.7/dist-packages (4.5.0)

Requirement already satisfied: requests<3,>=2.27.0 in /usr/local/lib/python3.7/dist-packages (from tweepy) (2.27.1)

Requirement already satisfied: requests-oauthlib<2,>=1.0.0 in /usr/local/lib/python3.7/dist-packages (from tweepy) (1.3.0)
```

```
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.7/dist-packages (from requests<3,>=2.27.0->tweepy) (2.10) Requirement already satisfied: charset-normalizer~=2.0.0 in /usr/local/lib/python3.7/dist-packages (from requests<3,>=2.27.0->tweepy Requirement already satisfied: urllib3<1.27,>=1.21.1 in /usr/local/lib/python3.7/dist-packages (from requests<3,>=2.27.0->tweepy Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.7/dist-packages (from requests<3,>=2.27.0->tweepy) Requirement already satisfied: oauthlib>=3.0.0 in /usr/local/lib/python3.7/dist-packages (from requests-oauthlib<2,>=1.0.0->tweepy)
```

import tweepy

Create client object

Pass all credential keys while creating object - check

```
client = tweepy.Client(bearer_token = bearer_token)
```

Extract all tweets

We will use <u>Client.search_all_tweets()</u> to get tweets to our code.

In order to use this feature in Twitter you need advanced research access.

Know more about Twitter API access.

```
response = client.search_all_tweets("#omicron",max_results=500)
tweets = response.data
```

```
tweets_texts = []
```

```
for tweet in tweets:
    tweets_texts.append(tweet.text)

import pandas as pd

df = pd.DataFrame(data = tweets_texts, columns=["Tweets"])
```

df

```
Tweets
          RT @UNICEF Pakistan: Things can feel overwhelm...
  0
  1
                RT @Children044: Et lui, il risque pas d'engor...
  2
            RT @jbloom lab: Interesting new paper on #Omic...
            RT @HeartOTXHeartMD: "The average citizen is j...
  3
      RT @Antonio Caramia: BREAKING \\n\n \| In Italia...
495
                RT @njoyflyfishing: 7 Day Distribution of Covi...
496
              RT @rafaelg fisica: @voceriavirtual No me acor...
497
               RT @rafaelg_fisica: Se pasaron... de verdad es...
498
          RT @1MarioCervantes: Sigamos cuidándonos, aten...
499
            The end of #Covid, eh? Maybe #Omicron is a mut...
500 rows × 1 columns
```

```
df.to_csv("data.csv")
```

Pagination

While invoking search functions() we can get upto max of 500 tweets. But if we need to access more tweets - use Pagination.

Using Paginator we can traverse page by page of the response returned and access tweets in the page.

In tweepy class Paginator for Twitter APIv2

Requests per 15-minute window

• Recent search: 450

• Full-archive search: 300

Full-archive also has a 1 request / 1 second limit

```
tweets_response = []
import time
```

https://docs.tweepy.org/en/stable/faq.html#why-am-i-getting-rate-limited-so-quickly-when-using-client-search-all-tweets-with-paginator https://docs.tweepy.org/en/stable/faq.html#how-do-i-access-includes-data-while-using-paginator

```
for response in tweepy.Paginator(client.search_all_tweets, "#omicron #india lang:en -is:retweet",max_results=500).flatten(5000):
   tweets_response.append(response.text)
   time.sleep(1)
```

```
KeyboardInterrupt

Traceback (most recent call last)

<ipython-input-85-e883f8caf3cc> in <module>()

1 for recense in twoony Paginaton(client search all tweets "#omicron #india languer sistrotweet" max results=500) flatt

len(tweets_response)

620
```

tweets_response[1:100]

['#Omicron sub-variant BA.2 is more prevalent in comparison to the BA.1 variant in #India now\n\nhttps://t.co/8sdv7I4MTo', 'While the #Omicron tally remains high, there has been a drop in daily cases in some states. Here are the state-wise updated "#NSTworld #India's capital announced the end of a weekend #curfew and eased other stringent #coronavirus restrictions, with ''Omicron wave may recede rapidly but India must strengthen health system' #Omicron #wave https://t.co/yfIIlXUqYO #COvid #De 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea 'Indian army people's army\n#IndianArmy #India #JammuAndKashmir #Jammu #like #LoveStory #Trending #TREASURE #HealthTech #hea ' ↑ Delhi Health bulletin 27th Jan 2022, +ve │ \nTotal cases - 4291\nDeaths - 34\nPositivity- 9.56%\nRecovery- 9397\n#Omicro 'Covid19 Updates Jan 27th 2022\n#covid #coronavirus #corona #stayhome #quarantine #staysafe #instagram #like #updates #india '@prudentgoa @goacm were bhivpachi garaz na during New Year. By the way is their government in #Goa ? \n\n#COVID19 #coronavi 'Omicron sub-variant BA.2 gradually increasing in India: Centre\n\n#Omicron #SubVariantBA2 #India #YesPunjab\n\nhttps://t.cc '#MiddayNews |\n\n#Omicron sub-variant BA.2 gradually #increasing in #India: Centre\n\nhttps://t.co/z2NuVHoC4L', 'Omicron sub-variant BA.2 gradually increasing in India: Centre #Omicron #gradually https://t.co/4bWDxtNeQe #Bid #COvid #Dei '@DrSJaishankar Praying for your quick and complete recovery Д∖n\n@JPNadda #covid19 #omicron #india #Coronavirus #OmicronV 'Omicron | Full Lockdown again | Valimai Update | KAVALAIGAL | Funny | Ch... https://t.co/KKVvjxltTj via @YouTube #youtube # 'Omicron sub-variant BA.2 is more prevalent in India, says NCDC Director\n#India #Omicron #COVID19 #NationalCentreforDisease 'Start Your Very Own Carpooling Venture!!!\n.\n#puchkoo #carpooling #family #weekend #cab #drive #driving #newconcept #india 'Coronavirus Omicron India Live: India reports over 2.86 lakh new cases; positivity rate jumps to 19.5%\n\n∏: Read more at 'Top News Live Updates: Centre confirms Omicron dominant Covid variant in India\n\n#Omicron #Coronavirus #India \n\nhttps:// 'Director of National Centre for Disease Control (#NCDC) Dr #SKSingh said that #Omicron sub-variant BA.2 is the more prevale '@ndtv #Omicron\n#COVID19\n#Coronavirus\n\nDisastrous lockdowns by useless #BJP buffoons 🐒 have destroyed the economy of # '#Omicron\n#COVID19\n#Coronavirus\n\nDisastrous lockdowns by useless #BJP buffoons 🎇 have destroyed the economy of #India '#Omicron, which is also referred to as B.1.1.529, has three main substrains, BA.1, BA.2, and BA.3. #OmicronInIndia #COVID19 'COVID-19: Omicron sub-variant BA.2 is more prevalent in India now, says Centre\n\n#coronavirus #CoronavirusUpdates #Covid19

```
'#Omicron sub-variant BA.2 is more prevalent in #India now: #NCDC Director on #COVID19situation in India https://t.co/9BLCr;
'India reports over 2.86 lakh new cases, positivity rate jumps to 19.5% #India #COVID19 #Covid 19 #CovidTesting #OmicronVari
'#Omicron sub-variant #BA2 is more prevalent in #India now: @NCDCgov Director https://t.co/xCz61nTkGt',
'#Omicron sub-variant BA.2 is more prevalent in India now: #NCDC Director on #COVID19 situation in #India',
'While the #Omicron tally remains high, there has been a drop in daily cases in some states. Here are the state-wise updated
'Do you see an endgame for Covid this year (2022)?\n\n#COVID19 #covid19news #covid19pandemic #covid19vaccines #covid #covid
'Read the full news: <a href="https://t.co/DHjYA6kaBb\n\n#Apradhkyun">https://t.co/DHjYA6kaBb\n\n#Apradhkyun</a> #latestnews #CNBC #aajtak #khabarabtak \n#covid #coronavirus #la
'No obstructions will stop @rishikulshala to perform on grounds. \n\nEducation is now become necessity for all let's brace u
'Omicron wave: What next? #Omicron #India #HealthcareSystem https://t.co/5e@YdkOXNh',
'Omicron wave: What next? #Omicron #India #HealthcareSystem https://t.co/lgkl1iHkRZ',
'#Indonesia #omicron cases are ramping higher and #Malaysia is on deck for trouble. https://t.co/Dib1YJcKX1 #Singapore #Japa
"I feel that 40% of (#Omicron) cases will go unreported/untested this time around owing to less severe symptoms & amp; #Dolo@
'While the #Omicron tally remains high, there has been a drop in daily cases in some states. Here are the state-wise updated
'Delhi will report less than 5,000 COVID cases today, situation in control: Satyendar Jain \n\n#NewsCapital #SatyendarJain #
'India logs 2,86,384 new COVID-19 cases in last 24 hours\n\n#coronavirus #COVID19 #India #IndiaFightsCorona #Omicron \n\nRea
"#India reports less than 3 lakh #Covid cases for the third straight day\n\nCheck out the country's #vaccination status as
'As #COVID19 cases increase in #India there are many questions about #omicron. Join our #webinar on Feb 2, 2022 by Dr. K Pra
'Understanding COVID-19: Can Omicron save the world? https://t.co/wEXtFleZJC\n #trending #trendingnews #breakingnews #breaki
'India Reports Over 2.86 Lakh New Cases, Omicron Peak To Cross By February 15 @WHO @MoHFW INDIA ∖n∖n#India #CoronavirusUpdat
'India reports 2.86 lakh COVID-19 cases in 24 hours | Indiablooms - First Portal on Digital News Management https://t.co/z50
'Happy Republic Day !!!\n#TogetherWeCanDefeat #RepublicDay #India #Indian #HappyRepublicDay #IndianArmy #RepublicDay2022 #73
'Here are the latest updates.\n#VOHCovid19Tracker\n\n#voiceofhealth #coronavirus\n#coronavirusindia #covid19 #corona\n#covic
'USISPF President and CEO @MukeshAghi spoke to @joinsumit on @WIONews to discuss the impact of #Omicron on #India's economy
'#GIS Representation of #Covid 19 scenario for #India for 27th Jan 2022, prepared by @CSIR NEERI\nTotal #Vaccination 1,63,8
'#COVID19 cases are once again rapidly increasing in the country. A total of 2,86,244 new cases & amp; 573 deaths have been r
'The new sub-varient is a branch of the main Omicron varient BA.1 and is studied by researchers around the globe #fitnorthe
'2 years into the #Covid19 pandemic; besides the #coronavaccine, masks have been an able ally in combating the virus. We sha
```

Save to csv

```
df2 = pd.DataFrame(tweets_response, columns=["tweets"])
df2.to_csv("omicronindia.csv")
```



