

Task No: 11 A

Date: 08/10/2025

Collect Social Media Data from a Twitter to a Local File with the Topic 'covid 19'

Tools: Python: Tweepy, Twitter Developer

CO5

K3

AIM:

To collect Social Media Data from a Twitter to a Local File with the Topic 'covid 19'

PROCEDURE:

1. Install tweepy and json module in pycharm
2. Import tweepy and json module.
3. Create an account in Twitter Developer mode.
4. Get the Twitter API credentials – consumer key, consumer secret, access token, access token secret.
5. Authenticate with Twitter API
6. Search query and set, number of tweets to collect
7. Create File to save the collected data with file name 'covid19_tweets.json'
8. Collect tweets and save to a file

PROGRAM:

```
import tweepy
import json
```

```
consumer_key = 'KbKxl06BkeqAcwNhJnBMN5s5M'
consumer_secret = 'LaVFLQhzy57mVDo9dbT60QOXnN6Ajm09Q6PAmSgPGoozZqhM9'
access_token = '1709726896194244609-w4KYxcGTyA4GHjlO7kJHzQlCWivVvSm'
access_token_secret = 'G8uyaHaIXoDUMfzVW3Ao6sAWRZ328Y2B6RraAeEU8p4e3'
```

```
auth = tweepy.OAuth2BearerHandler(consumer_key, consumer_secret)
auth.set_access_token(access_token, access_token_secret)
api = tweepy.API(auth, wait_on_rate_limit=True)
search_query = 'covid 19'
num_tweets = 1000
output_file = 'covid19_tweets.json'
tweets = []
for tweet in tweepy.Cursor(api.search, q=search_query, lang='en').items(num_tweets):
    tweets.append(tweet._json)
```

```
with open(output_file, 'w', encoding='utf-8') as file:
    json.dump(tweets, file, ensure_ascii=False, indent=4)
```

```
print(f'{len(tweets)} tweets collected and saved to {output_file}')
```

SAMPLE OUTPUT: 'covid19_tweets.json'

```
[{
  "State": "Andaman and Nicobar Islands",
  "Confirmed": 7651,
  "Recovered": 7518,
  "Deaths": 129,
  "Active": 4,
  "Last_Updated_Time": "13/08/2021 23:27:22",
  "Migrated_Other": 0,
  "State_code": "AN",
  "Delta_Confirmed": 0,
  "Delta_Recovered": 0,
  "Delta_Deaths": 0,
  "State_Notes": ""
},
{
  "State": "Andhra Pradesh",
  "Confirmed": 2066450,
  "Recovered": 2047722,
  "Deaths": 14373,
  "Active": 4355,
  "Last_Updated_Time": "13/08/2021 23:27:22",
  "Migrated_Other": 0,
  "State_code": "AP",
  "Delta_Confirmed": 0,
  "Delta_Recovered": 0,
  "Delta_Deaths": 0,
  "State_Notes": ""
}]
```

RESULT:

Thus, to collect Social Media Data from a Twitter to a Local File with the Topic 'covid 19' using python were successfully completed.

Twitter Developers

developer.twitter.com/en/portal/projects/1709735736939876352/apps/27874435/settings

DocsCommunityUpdatesSupport

VTCharlesPr

SettingsKeys and tokens

App details

NAME

VTCharlesPr

APP ICON

APP ID

27874435

Authentication docs

Authentication methods

v2 endpoints available with OAuth 2.0

PRIVACY

COOKIES

TWITTER TERMS & CONDITIONS

DEVELOPER POLICY & TERMS

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Twitter Developers

developer.twitter.com/en/portal/projects/1709735736939876352/apps/27874435/keys

Did you save your API Key and API Key Secret?

- Save them in a secure location
- Treat them like a password or a set of keys
- If security has been compromised, regenerate them
- DO NOT store them in public places or shared docs

API Key ⓘ

9A1hvnU3QkxIhGL5z6BUKAXOq

Copy

API Key Secret ⓘ

t95bhl70JTq2Xq0UgGNENaKM3SmqjKhrRctnJ...

Copy

Yes, I saved them

API Key and API Key Secret regenerated.

Helpful docs

About Projects

About Apps

About authentication

App permissions

Twitter Developers

developer.twitter.com/en/portal/projects/1709735736939876352/apps/27874435/keys

Developer Portal

- Dashboard
- Projects & Apps
 - Overview
 - Default project-17097357221...
 - VTCharlesPr
- Products **NEW**
- Account

Did you save your Access Token and Access Token Secret?

- Save them in a secure location
- Treat them like a password or a set of keys
- If security has been compromised, regenerate them
- DO NOT store them in public places or shared docs

Access Token

1709726896194244609-rJrQJyHpqah8pDmAGcbEYYWHorCTq **Copy**

Access Token Secret

Ec5Rgc7BoQYDWUW47eTrqVYTa8Za1SivSpzZq... **Copy**

Yes, I saved them

Access Token and Access Token Secret regenerated.

- About authentication
- App permissions
- Authentication best practices
- API Key
- Bearer Tokens
- Access Token and Secret

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File Edit View Navigate Code Refactor Run Tools VCS Window Help makeready - twitterdata.py

makeready > twitterdata.py

Settings

Project: makeready > Python Interpreter For current project

Python Interpreter: Python 3.9 (makeready) C:\Users\Lenovo\PycharmProjects\makeready\venv\Scripts\python.exe

Available Packages

Package	Version	Latest version
Flask-Tweepy		
bottle-tweepy		
forte.tweepy		
mtweepy		
stocktweepy		
tweepy		
tweepy-authlib		
tweepy-mastodon		
tweepy-parrot		
tweepy-streaming-api-emu		
tweepy-trc		
tweepy-utils		

Description

Twitter library for Python

Version: 4.14.0

Author: Joshua Roesslein

<mailto:tweepy@googlegroups.com>

<https://www.tweepy.org/>

Type here to search

31°C Partly sunny 10:29 AM 10/6/2023

Task No: 11 B

Download and Set Up MongoDB Server and a Client Mongodb Compass.

CO5

Date:

Tools: MongoDB, Python: Scipy

K3

AIM:

To download, configure and upload the COVID19 datasets using MongoDB Server and a Client Mongodb Compass.

PROCEDURE:

1. Installing MongoDB on Windows:
2. Go to the official MongoDB website (<https://www.mongodb.com/try/download/community>) and download the MongoDB Community Server for Windows.
3. Run the downloaded installer (.msi file).
4. Choose a custom installation if you want to specify a custom installation directory or options.
5. After installation, MongoDB should start automatically as a Windows service. Check this in the Windows Services Manager.
6. Open Mongodb Compass, By default, MongoDB listens on port 27017.
7. Import the COIVD19, state-wise data into the Mongodb

SAMPLE INPUT FILE: [File Name: covid19statewise.json]

```
[{
  "State": "Andaman and Nicobar Islands",
  "Confirmed": 7651,
  "Recovered": 7518,
  "Deaths": 129,
  "Active": 4,
  "Last_Updated_Time": "13/08/2021 23:27:22",
  "Migrated_Other": 0,
  "State_code": "AN",
  "Delta_Confirmed": 0,
  "Delta_Recovered": 0,
  "Delta_Deaths": 0,
  "State_Notes": ""
},
{
  "State": "Andhra Pradesh",
  "Confirmed": 2066450,
  "Recovered": 2047722,
  "Deaths": 14373,
  "Active": 4355,
  "Last_Updated_Time": "13/08/2021 23:27:22",
  "Migrated_Other": 0,
  "State_code": "AP",
  "Delta_Confirmed": 0,
  "Delta_Recovered": 0,
  "Delta_Deaths": 0,
  "State_Notes": ""
}]
```

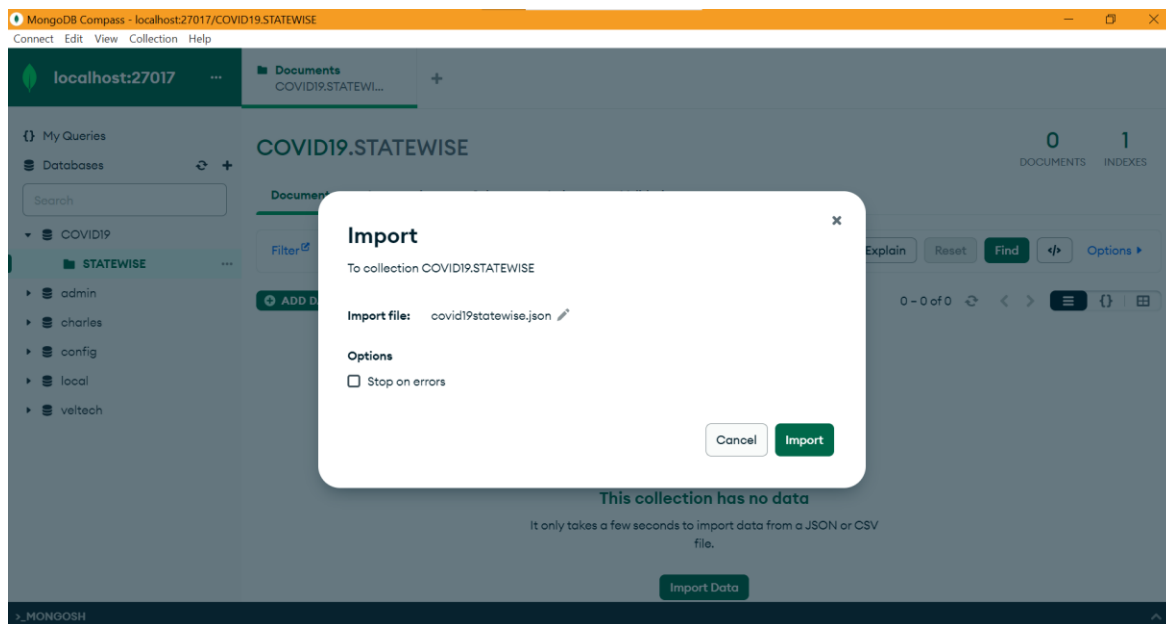
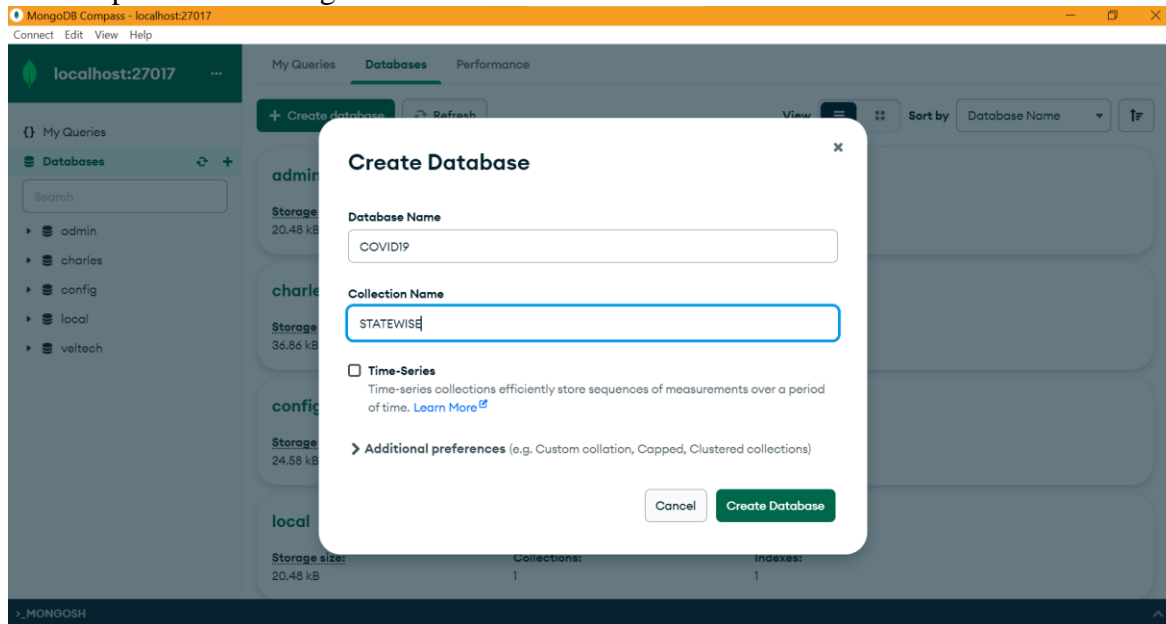
OUTPUT:

Import Completed

38 Documents Imported.

RESULT:

Thus the MongoDB Server and a Client MongoDB Compass were download, configured and COVID19 datasets were imported into MongoDB.



localhost:27017

Documents
COVID19.STATEWISE

My Queries

Databases

Search

COVID19

STATEWISE

- admin
- charles
- config
- local
- veltech

COVID19.STATEWISE

38
DOCUMENTS

1
INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or [Generate query](#)

Explain Reset Find Options

ADD DATA EXPORT DATA

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```
{
  "_id": ObjectId('651fa8bea2f36a952c612783'),
  "State": "Total",
  "Confirmed": 34285612,
  "Recovered": 33661339,
  "Deaths": 458478,
  "Active": 152686,
  "Last_Updated_Time": "13/08/2021 23:27:22",
  "Migrated_Other": 13197,
  "State_code": "TT",
  "Delta_Confirmed": 0,
  "Delta_Recovered": 0,
  "Delta_Deaths": 0,
  "State_Notes": ""
}
```

Import completed.
38 documents imported.

Id('651fa8bea2f36a952c612784')