Task No: 11 A Date:	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:

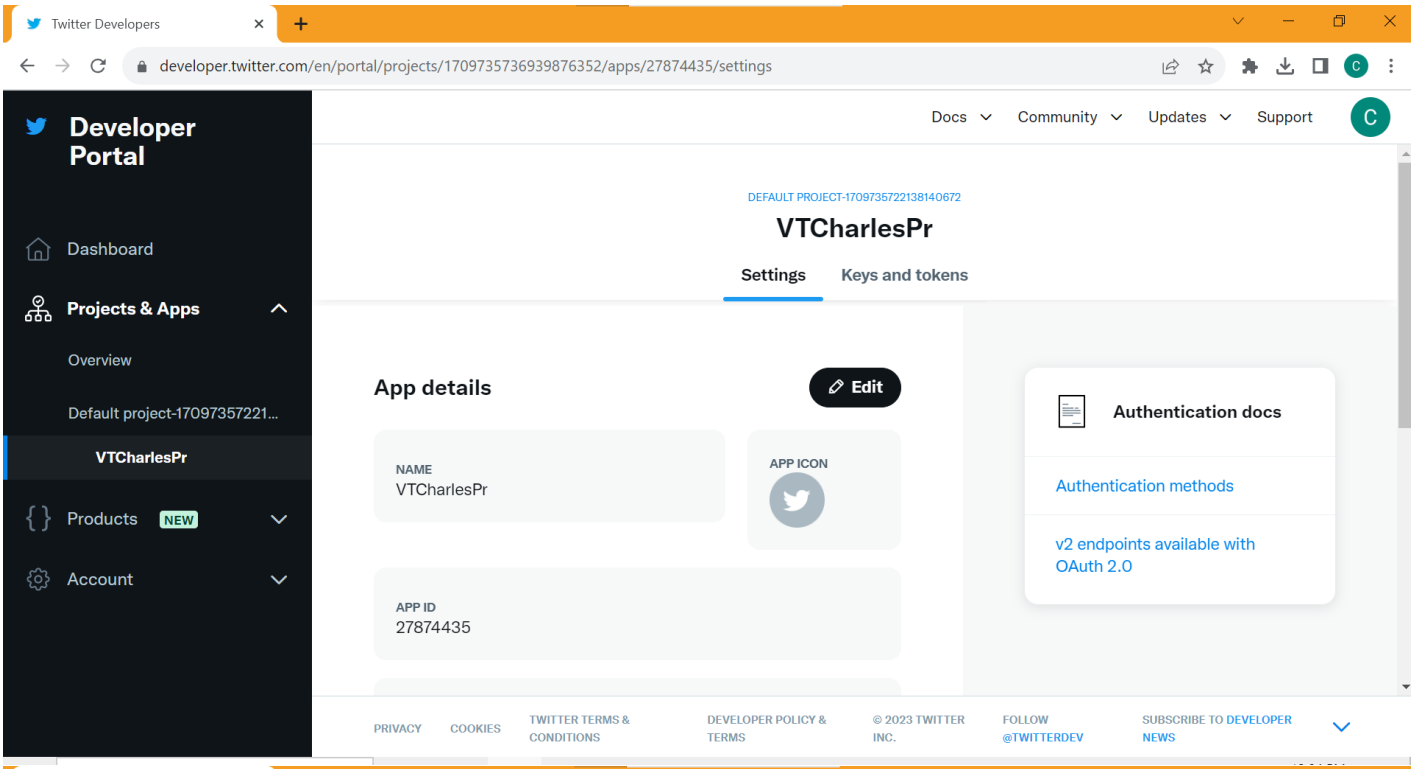
```
import tweepy
import json

consumer_key = 'KbKxl06BkeqAcwNhJnBMN5s5M'
consumer_secret = 'LaVFLQhzzy57mVDo9dbT60QOXnN6Ajm09Q6PAmSgPGoozZqhM9'
access_token = '1709726896194244609-w4KYxcGTyA4GHjlO7kJHzQlCWiVvSm'
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
Developer Portal
Docs
Community
Updates
Support
Dashboard
Projects & Apps
Overview
Default project-17097357221...
VTCharlesPr
Products
NEW
Account
DEFAULT PROJECT-1709735722138140672
VTCharlesPr
Settings
Keys and tokens
App details
Edit
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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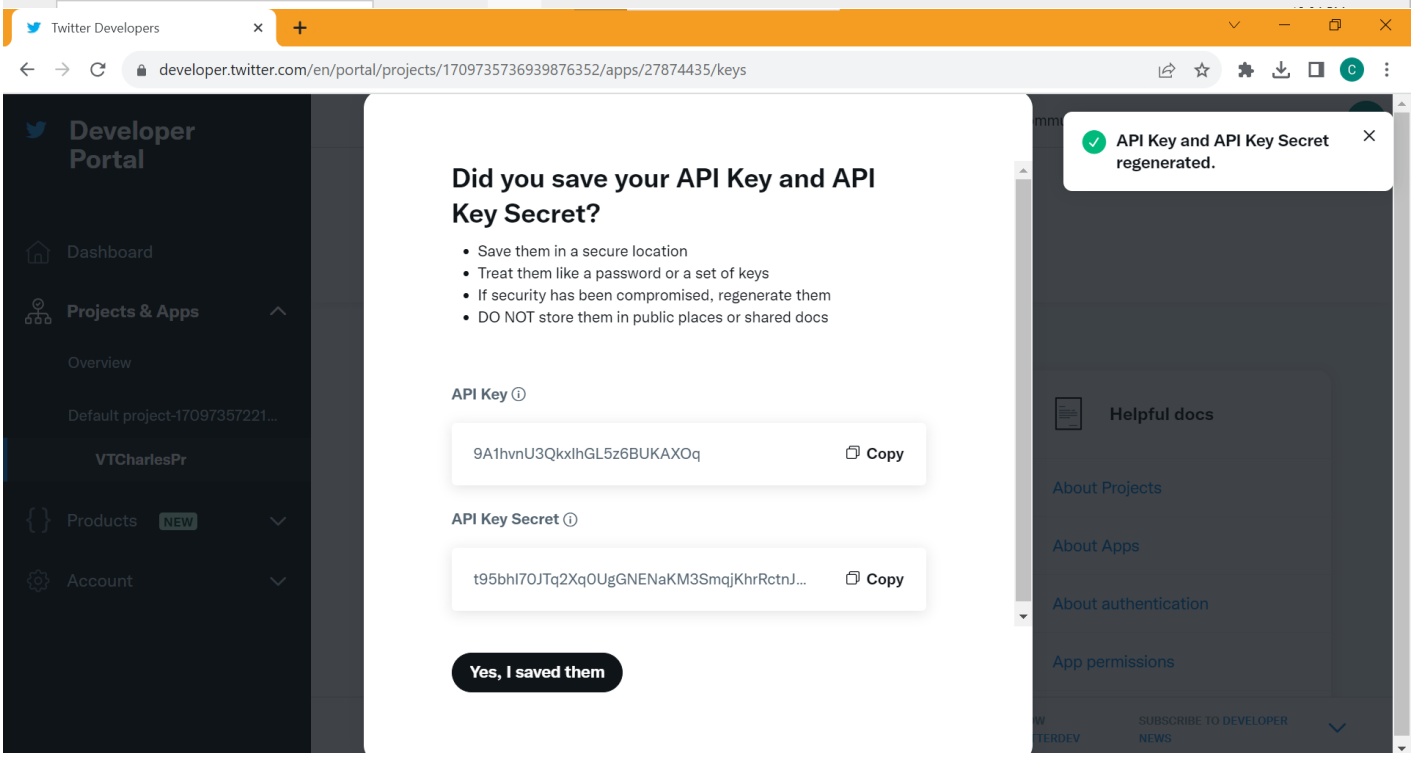
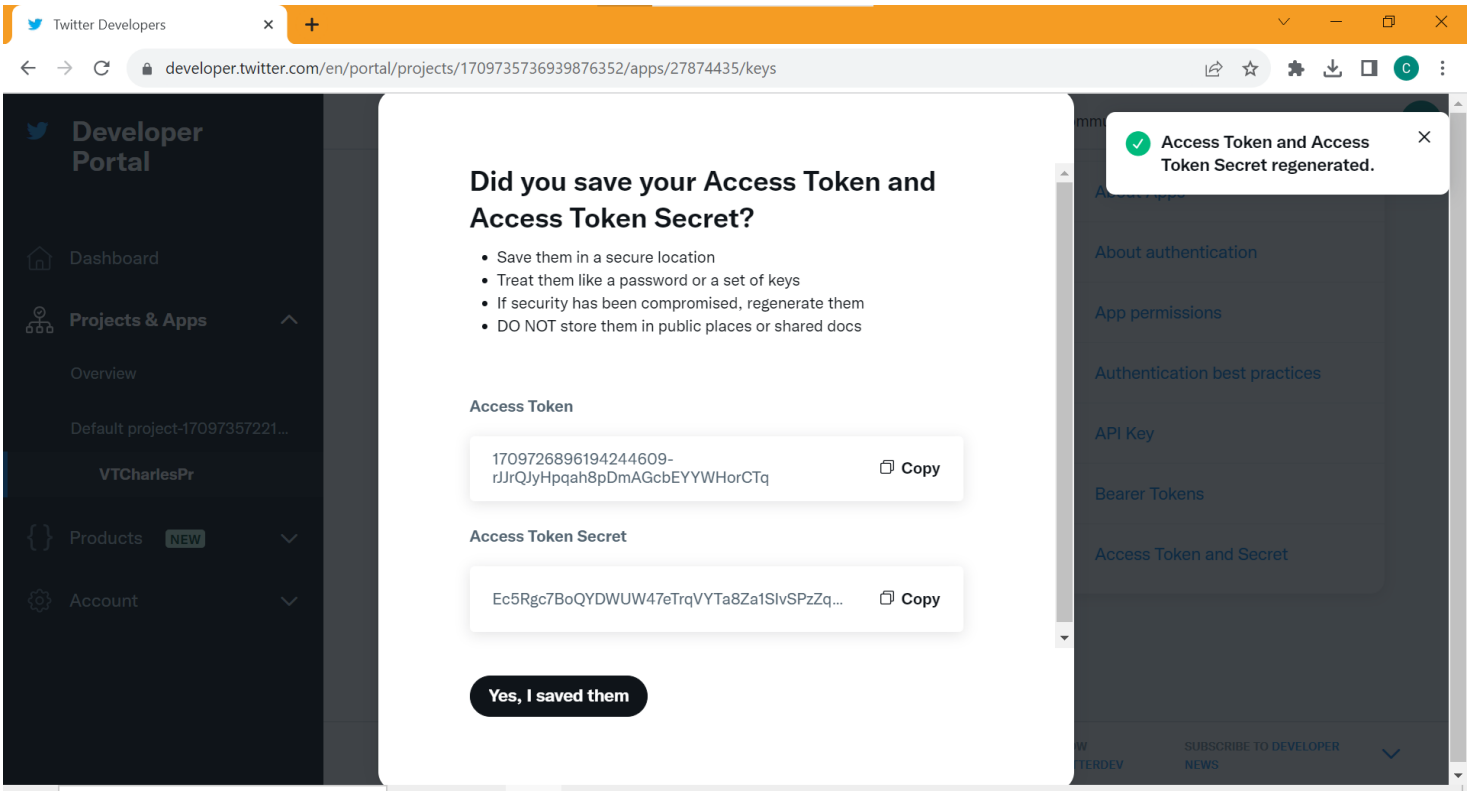
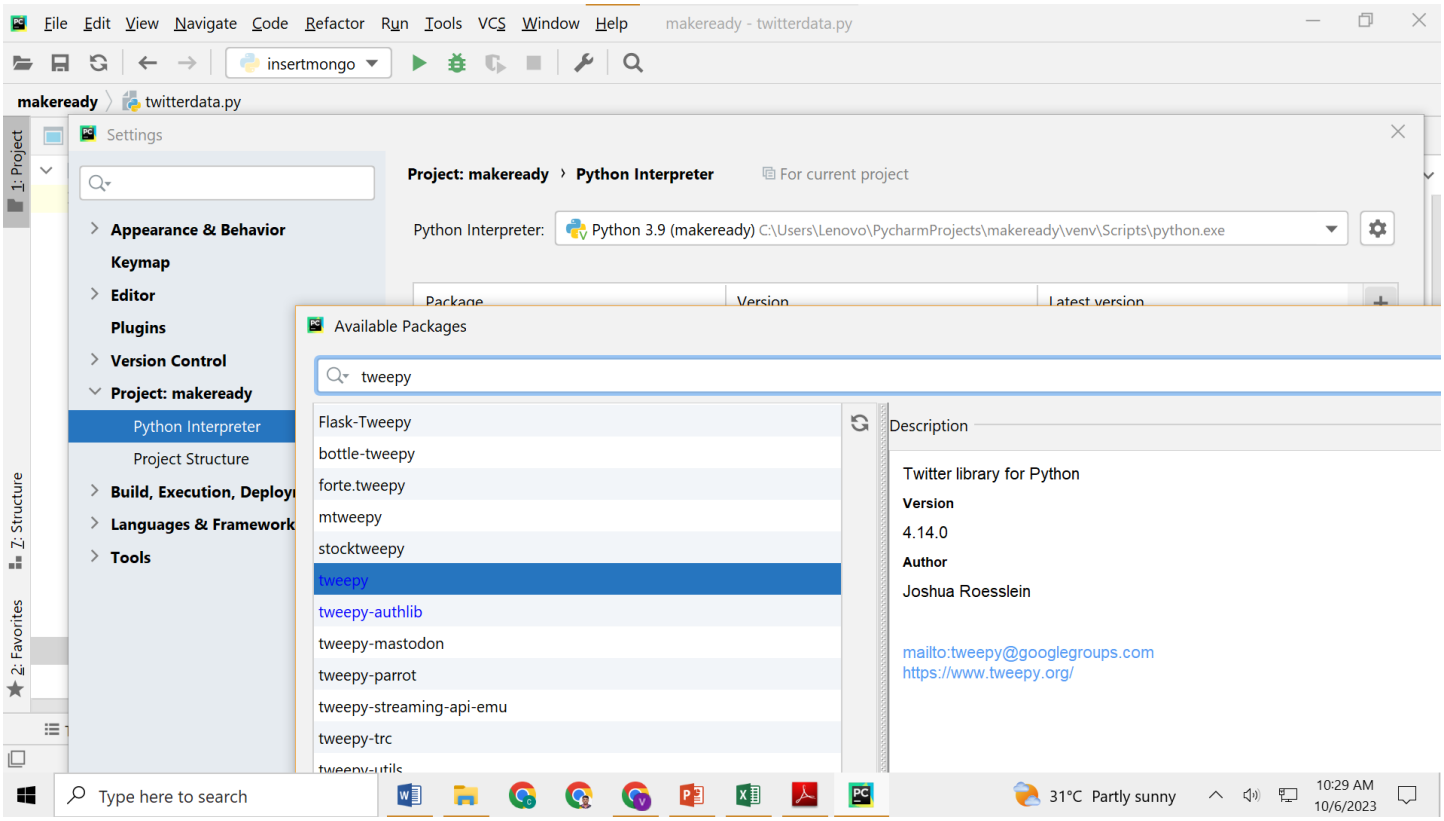

Twitter Developers
developer.twitter.com/en/portal/projects/1709735736939876352/apps/27874435/keys
Developer Portal
Dashboard
Projects & Apps
Overview
Default project-17097357221...
VTCharlesPr
Products
NEW
Account
Did you save your API Key and API Key Secret?
Save them in a secure location
Treat them 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
t95bhI70JTq2Xq0UgGNENaKM3SmqjKhrRctnJ...
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-rJJrQJyHpqah8pDmAGcbEYYWHorCTq
Copy
Access Token Secret
Ec5Rgc7BoQYDWUW47eTrqVYTa8Za1SlvSPzZq...
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


File Edit View Navigate Code Refactor Run Tools VCS Window Help
makeready - twitterdata.py
insertmongo
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
Appearance & Behavior
Keymap
Editor
Plugins
Version Control
Project: makeready
Python Interpreter
Project Structure
Build, Execution, Deploy
Languages & Framework
Tools
Available Packages
tweepy
Flask-Tweepy
bottle-tweepy
forte.tweepy
mtweepy
stocktweepy
tweepy
tweepy-authlib
tweepy-mastodon
tweepy-parrot
tweepy-streaming-api-emu
tweepy-trc
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 Date:	Download and Set Up MongoDB Server and a Client Mongodb Compass. **Tools: MongoDB, Python: Scipy**	CO5 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": ""
  }]
```

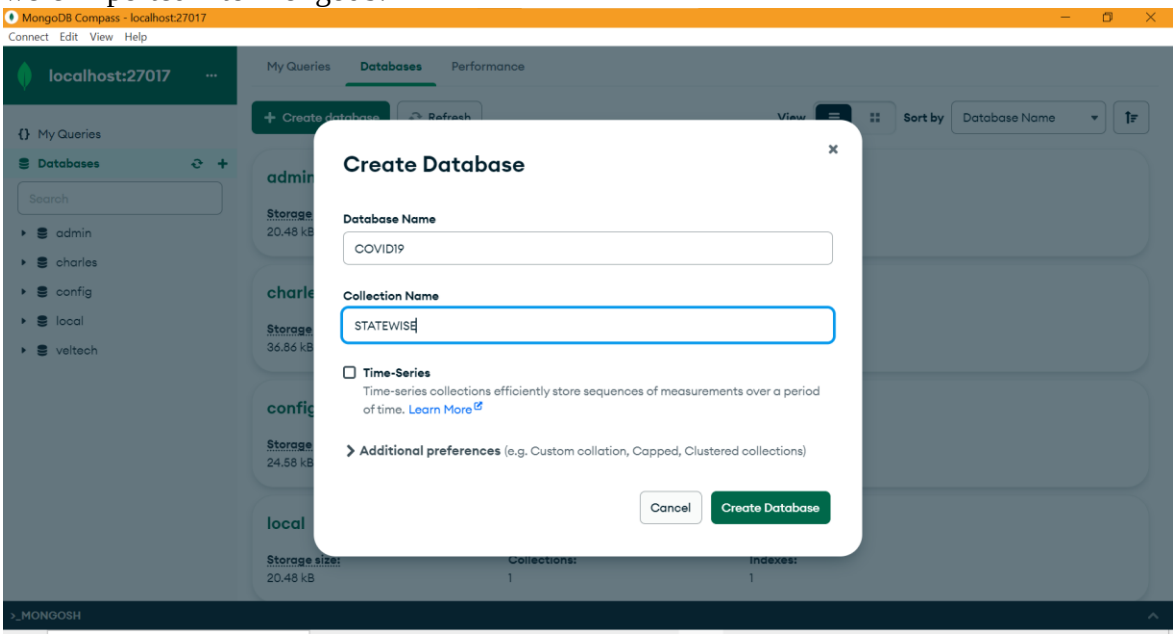

OUTPUT:

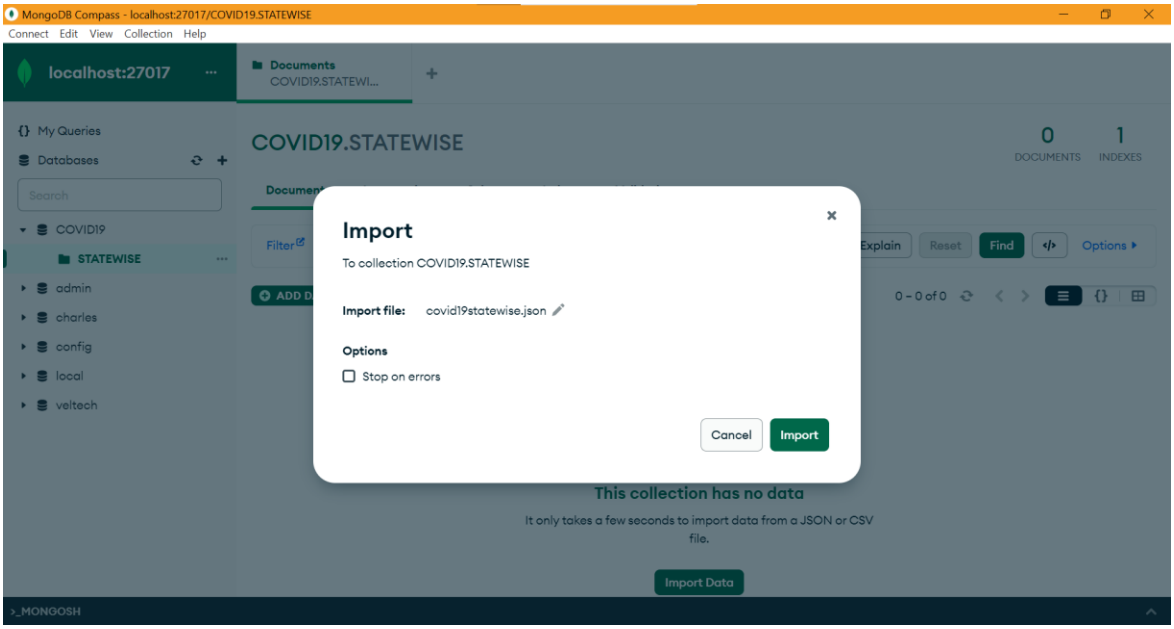
Import Completed

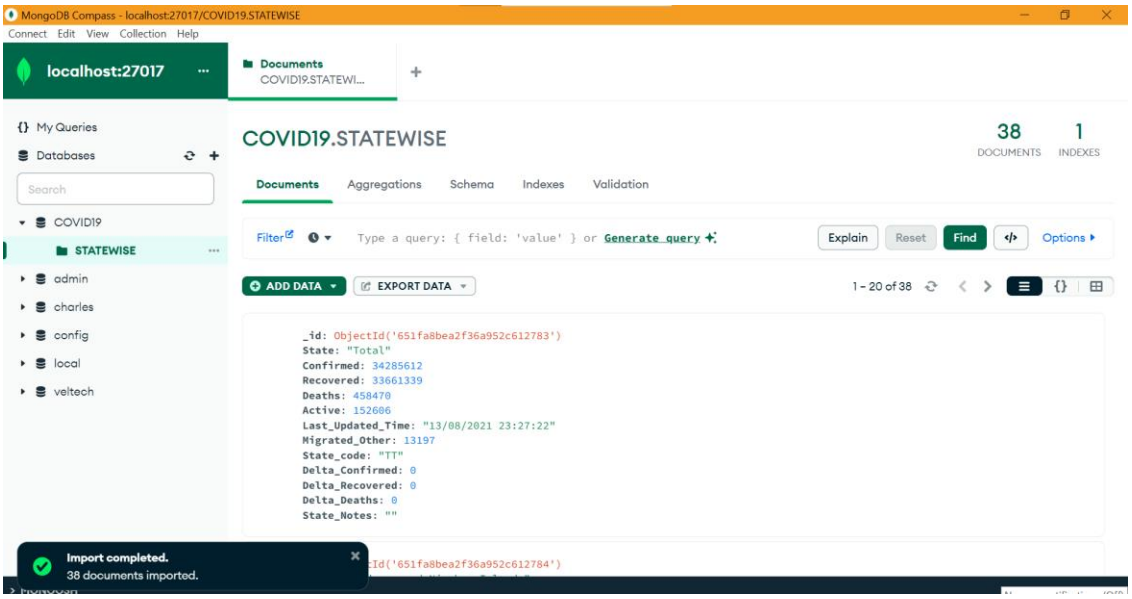
38 Documents Imported.

RESULT:

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






MongoDB Compass - localhost:27017/COVID19.STATEWISE
Connect Edit View Collection Help
localhost:27017
Documents
COVID19.STATEWI...
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
1 – 20 of 38
_id: ObjectId('651fa8bea2f36a952c612783')
State: "Total"
Confirmed: 34285612
Recovered: 33661339
Deaths: 458470
Active: 152606
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.