

```
In [15]: import yfinance as yf
import pymongo
from apscheduler.schedulers.background import BackgroundScheduler
from datetime import datetime, timedelta
```

Main Code =>

```
In [ ]: import yfinance as yf
import pymongo
from apscheduler.schedulers.background import BackgroundScheduler
from datetime import datetime, timedelta

# Connection to MongoDB
client = pymongo.MongoClient("mongodb://localhost:27017/")
db = client["stock_data"]
collection = db["icici_bank"]

# ICICI Bank ticker
ticker = "ICICIBANK.NS"

# function to fetch and store stock data
def fetch_and_store_data():
    now = datetime.now()
    start_time = datetime(now.year, now.month, now.day, 11, 15, 0)
    end_time = datetime(now.year, now.month, now.day, 14, 15, 0)

    if start_time <= now <= end_time:
        data = yf.Ticker(ticker).history(period="15m", interval="15m")
        data["Datetime"] = data.index
        data = data.reset_index(drop=True)
        data_dict = data.to_dict(orient="records")

        collection.insert_many(data_dict)
        print(f"Stored data for {now.strftime('%Y-%m-%d %H:%M:%S')}")

# APS Scheduler job to run every 15 minutes
scheduler = BackgroundScheduler()
scheduler.add_job(fetch_and_store_data, "interval", minutes=15)
scheduler.start()

try:
    # scheduler for a week (adjust the end date as needed)
    end_date = datetime.now() + timedelta(days=7)
    while datetime.now() <= end_date:
        pass
except (KeyboardInterrupt, SystemExit):
    # scheduler gracefully when manually interrupted
    scheduler.shutdown()
# END OF CODE
```

```
In [ ]:
```

```
In [16]: pip install pymongo
```

Defaulting to user installation because normal site-packages is not writeable
Note: you may need to restart the kernel to use updated packages.

Requirement already satisfied: pymongo in c:\users\pritik\appdata\roaming\python\python311\site-packages (4.6.0)

Requirement already satisfied: dnspython<3.0.0,>=1.16.0 in c:\users\pritik\appdata\roaming\python\python311\site-packages (from pymongo) (2.4.2)

In [17]: `pip install apscheduler`

Defaulting to user installation because normal site-packages is not writeable

Requirement already satisfied: apscheduler in c:\users\pritik\appdata\roaming\python\python311\site-packages (3.10.4)

Requirement already satisfied: six>=1.4.0 in c:\programdata\anaconda\lib\site-packages (from apscheduler) (1.16.0)

Requirement already satisfied: pytz in c:\programdata\anaconda\lib\site-packages (from apscheduler) (2022.7)

Requirement already satisfied: tzlocal!=3.*,>=2.0 in c:\users\pritik\appdata\roaming\python\python311\site-packages (from apscheduler) (5.2)

Requirement already satisfied: tzdata in c:\users\pritik\appdata\roaming\python\python311\site-packages (from tzlocal!=3.*,>=2.0->apscheduler) (2023.3)

Note: you may need to restart the kernel to use updated packages.

In [18]: `client = pymongo.MongoClient("mongodb://localhost:27017/")
db = client["stock_data"]
collection = db["icici_bank"]`

In [9]: `# ICICI Bank ticker
ticker = "ICICIBANK.NS"`

In [10]: `# function to fetch and store stock data
def fetch_and_store_data():
 now = datetime.now()
 start_time = datetime(now.year, now.month, now.day, 11, 15, 0)
 end_time = datetime(now.year, now.month, now.day, 14, 15, 0)

 if start_time <= now <= end_time:
 data = yf.Ticker(ticker).history(period="15m", interval="15m")
 data["Datetime"] = data.index
 data = data.reset_index(drop=True)
 data_dict = data.to_dict(orient="records")

 collection.insert_many(data_dict)
 print(f"Stored data for {now.strftime('%Y-%m-%d %H:%M:%S')}")`

In [11]: `# APS Scheduler job to run every 15 minutes
scheduler = BackgroundScheduler()
scheduler.add_job(fetch_and_store_data, "interval", minutes=15)
scheduler.start()`

In []: `try:
 # scheduler for a week (adjust the end date as needed)
 end_date = datetime.now() + timedelta(days=7)
 while datetime.now() <= end_date:
 pass
except (KeyboardInterrupt, SystemExit):
 # Shutdown the scheduler gracefully when manually interrupted
 scheduler.shutdown()`

In []:

In []: