05/03/25

Lab 0 : To Do

Write a python program to import and export data using Pandas library functions

Stock Market Data Analysis :

```
import pandas as pd
import yfinance as yf
import matplotlib.pyplot as plt

tickers = ["HDFCBANK.NS", "ICICIBANK.NS", "KOTAKBANK.NS"]

data = yf.download(tickers, start="2024-01-01", end="2024-12-30",
        groupby = 'ticker')

print(data.head())
print(data.shape)
print(data.columns)

hdfcbank_data = data['HDFCBANK.NS']
print("HDFCBANK Statistics")
print(hdfcbank_data.describe())

hdfcbank_data['Daily Return'] = hdfcbank_data['Close'].
                                pct_change()

plt.figure(figsize = (12, 6))
plt.subplot(2, 1, 1)
hdfcbank_data['Close'].plt(title="HDFCBANK - Closing Price")
```

```
plt.subplot(2,1,2)
hdfcbank_data['Daily Return'].plot(title="HDFC BANK -
Daily Returns", color='orange')
plt.tight_layout()
plt.show()

icicibank_data = data['ICICIBANK.NS']
print("ICICI BANK statistics")
print(icicibank_data.describe())

icicibank_data['Daily Return'] = icicibank_data['Close'].
                                 pct_change()

plt.figure(figsize=(12,6))
plt.subplot(2,1,1)
icicibank_data['Close'].plot(title="ICICI BANK - Closing Price")
plt.subplot(2,1,2)
icicibank_data['Daily Returns'].plot(title="ICICI BANK -
Daily Returns", color='orange')
plt.tight_layout()
plt.show()


kotakbank_data = data['KOTAKBANK.NS']
print("KOTAKBANK statistics")
print(kotakbank_data.describe())

kotakbank_data['Daily Return'] = kotakbank_data['Close']
                                 .pct_change()
```

```
plt.figure(figsize=(12,6))
plt.subplot(2,1,1)
kotakbank_data['Close'].plot(title="KOTAK BANK- Closing Pr
plt.subplot(2,1,2)
kotakbank_data['Daily Returns'].plot(title="KOTAK BANK-
Daily Returns", color='orange')
plt.tight_layout()
plt.show()
```

05.03.22