1BM22CS241

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HDFCBANK_data Industries - Closing Price

HDFCBANK_data Industries - Daily Returns

ICICIBANK_data Industries - Closing Price

ICICIBANK_data Industries - Daily Returns

KOTAKBANK_data Industries - Closing Price

KOTAKBANK_data Industries - Daily Returns
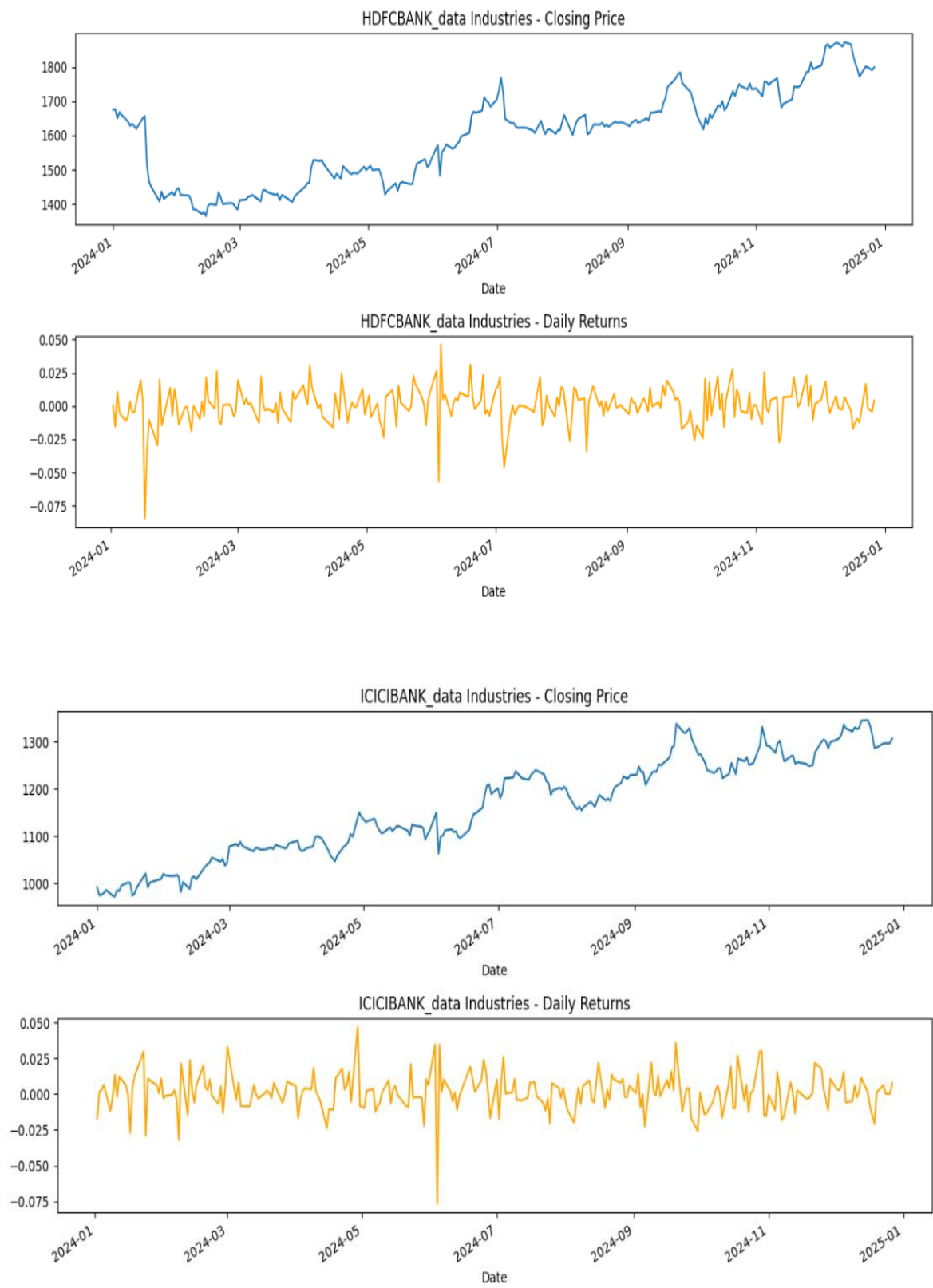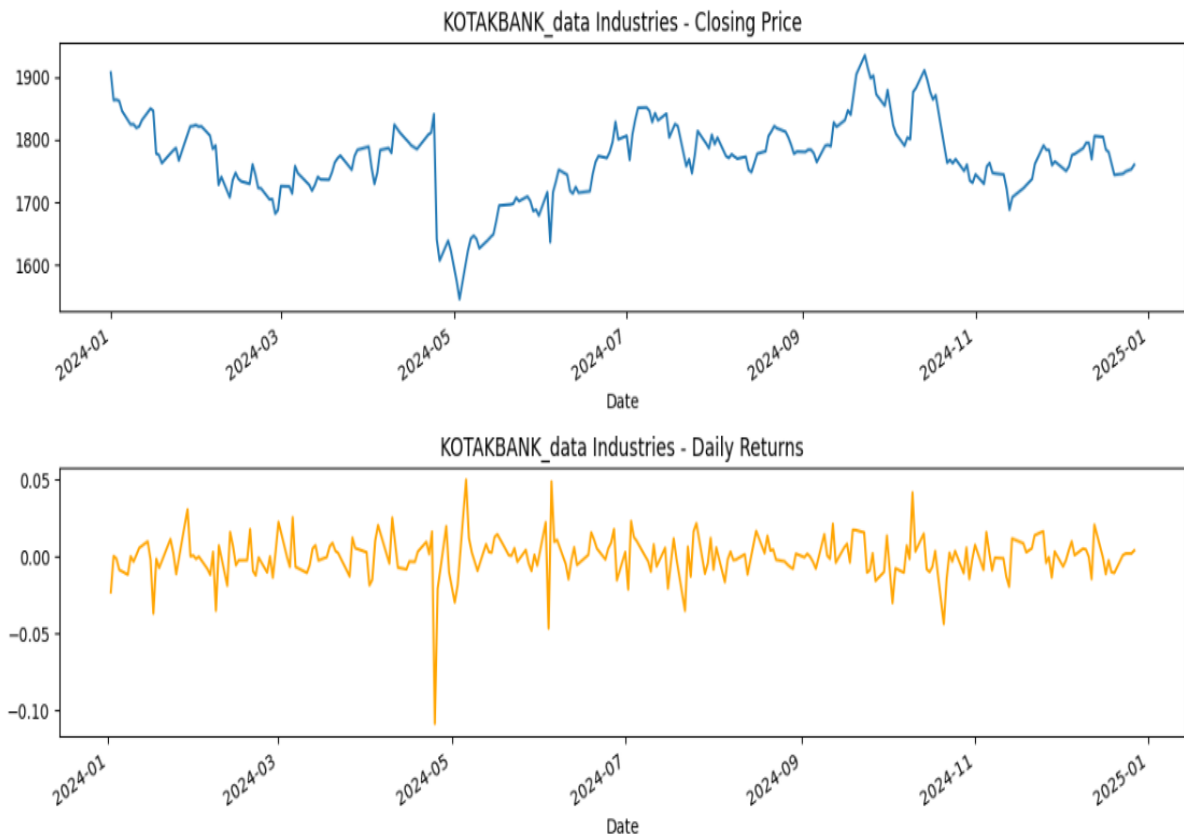
	Product	Quantity	Price	Sales	Region
0	Laptop	5	1000	5000	North
1	Mouse	15	20	300	West
2	Keyboard	10	50	500	East
3	Monitor	8	200	1600	South
4	Laptop	12	950	11400	North

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lab 0,1 :

Stock Market Data for Analysis

```
// Import required libraries
import yfinance as yf
import pandas as pd
import matplotlib.pyplot as plt


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

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

print(data.head())

HDFC_data = data['HDFCBANK.NS']
print(HDFC_data.describe())

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

plt.figure(figsize=(12,6))
plt.subplot(2,1,1)
HDFC_data['Close'].plot(title="HDFC Closing price")
plt.subplot(2,1,2)
HDFC_data['Daily Return'].plot(title="HDFC Daily Returns", color='orange')
plt.tight_layout()
plt.show()
HDFC_data.to_csv('HDFC_stock_data.csv')
```

```
ICICI-data = data ['ICICIBANK·NS']
ICICI-data ['Daily Return'] = ICICI data ['close'] · pct·change


plt·figure (figsize = (12,6))
ICICI data ['close'] · plot (title = '' ICICI -closing price'')
ICICI data ['Daily Return'] · plot (title = ''ICICI - Daily Returns'', color= 'orange')
plt· show()


KOTAK-data = data ['KOTAKBANK·NS']
KOTAK-data ['Daily Return'] = KOTAK-data ['close'] · pct·change


plt·figure (figsize = (12,6))
KOTAK-data ['close'] · plot (title = '' KOTAK-closing price'')
KOTAK-data ['Daily Return'] · plot (title = ''KOTAK - Daily Returns'', color= 'orange')
plt· show()
```

Q Importing and Exporting data

Method 1: Initializing values directly into DataFrame

```
import pandas as pd
data = {
'USN' = ['1BN22CS001', '1BN22CS002', '1BN22CS003', '1BN22CS004', '1BN22CS005']
'Names' = ['A', 'B', 'C', 'D', 'E'],
'Marks' = [96, 97, 98, 98, 99]
}

df = pd·DataFrame (data)
print (df· head())
```

Method 2: Importing datasets from Sklearn.datasets

```
import pandas as pd
from sklearn.datasets import load-diabetes
diabetes = pd.DataFrame(diabetes.data, columns = diabetes.feature-names)
df['target'] = diabetes.target
print(df.head())
```

Method 3: Importing datasets from specific .csv file

```
import pandas as pd
file-path = 'sampledata.csv'
df = pd.read-csv(file-path)
print(df.head())
```

Method 4: Downloading datasets from existing dataset repositories like Kaggle, UCI, Mendely, KEEL etc

// Download diabetes datasets from Mendely

```
df = pd.read-csv('diabetes.csv')
print(df.head())
```

lab1:

(i) df=pd.read.csv ("housing.csv")

(ii) df.info()

(iii) print (df.describe())

(iv) print (df ["ocean-proximity"].value-counts())

(v) Missing-values = df.isnull.sum()
columns-with-missing-values = missing-values (Missing-values >0]
print(columns-with-missing-values)