5/3/25

Bafna Gold
Date. Page.

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

* To-Do:-1 →

1) Method 1: Initializing values directly into DataFrame

# insert your known values, five rows of data with column headings as "USN", "Name", "Marks".

→ import pandas as pd

```
data = {'~~Name~~USN': ['1BM22CS259', '1BM22CS230', '1BM22CS231', '1BM22CS232', '1BM22CS240'],
        'Name': ['Shiv', 'Ansh', 'Salman', 'Virat', 'Jack'],
        'Marks': [99, 90, 89, 69, 42]}
df = pd.DataFrame(data)
print("Sample data:")
print(df.head())
```

2) Method 2: Importing datasets from sklearn.datasets

# Loading diabetes datasets sklearn.datasets.load_diabetes.

→
```
from sklearn.datasets import load_diabetes
diabetes = load_diabetes()
df = pd.DataFrame(diabetes.data, columns = diabetes.feature_names)
df['target'] = diabetes.target
print("Sample data:")
print(df.head())
```

3) Method 3: Importing datasets from a specific.csv file

# Sample_sales_data.csv.

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→ import pandas as pd.
file_path = 'sales.csv'
df = pd.read_csv(file_path)
print("sample data:")
print(df.head())

4) Method 4: Downloading datasets from existing dataset repositories like kaggle, UCI, KEEL etc

# Download diabetes datasets from Mendely.

→ df = pd.read_csv('diabetes.csv')
print(df.head())

Bafna Gold
Date Page

* To DO :-2 →

1) HDFC Bank Ltd., ICICI Bank Ltd, Kotak Mahindra Bank Ltd.

tickers = ["HDFCBANK.NS", "ICICI.NS", "KOTAK.NS"]

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

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

2) Start date: 2024-01-01, End date: 2024-12-30

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

3) Plot the closing price & daily returns for all the 3 banks mentioned.

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

hdfc_bank_data = data['HDFCBANK.NS']
print("HDFCBANK Statistics")
print(hdfc_bank_data.describe())
hdfc_bank_data['Daily Return'] = hdfc_bank_data['Close'].pct_change()

plt.figure(figsize=(12,6))
plt.subplot(2,1,1)
hdfc_data['Close'].plot(title='~~Reliance~~ HDFC Bank - closing price')

```
plt.subplot(2,1,2)
hdfc_data['Daily Return'].plot(title="HDFC Bank-
daily returns", color='orange')
plt.tight_layout()
plt.show()

hdfc_data.to_csv('HDFC.csv')
print("\n HDFC bank data saved to 'hdfc.csv'.")

icicibank_data = data['ICICIBANK.NS']
print("ICICI stats")
print(icicibank_data.describe())
icicibank_data['Daily Return'] = icicibank_data['Close'].
                                 pct_change()
icicidata['Daily Return'] = icicidata
plt.figure(12,6)
plt.subplot(2,1,1)
icicidata['Close'].plot(title="ICICI")
plt.subplot(2,1,2)
icidata['Daily Return'].plot(title="ICICI-DR",
                             color='orange')
plt.tight_layout()
plt.show()
icici_data.to_csv('icici_data.csv')


Kotak = data['KOTAKBANK.NS']
print("Kotak stats")
print(kotak.describe())
kotak_data['Daily Return'] = kotak['Close'].pct_change()
```

```
plt.figure(figsize=(12,6))
plt.subplot(2,1,1)
kotaks['Close'].plot(title="Kotak Bank")
plt.subplot(2,1,2)
kotaks['Daily Return'].plot(title="Kotak-DR",
                            color='orange')

plt.tight_layout()
plt.show()
kotaks_data.to_csv('Kotaks.csv')

print("\nBICICI & Kotak Bank data saved\n")
```

5/3/25