Lab-0 3/March/25

To-Do - 1

Using ~~Stock market data analysis~~.

1) import Pandas as pd

```
data = { 'Name' : [ 'U', 'V', 'W', 'X', 'Y' ]
'USN' = [111, 222, 333, 444, 555 ]
'Marks' = [64, 30, 80, 90, 50]
}
df = Pd.Dataframe (data)
Print ("sample data")
Print (df.head())
```

output:

	Name	age	city
0	Alice	25	New york
1	Bob	30	los angeles

2) Importing data set from Sklearn.datasets

```
from Sklearn.dataset import load.diabetes.
diabetes = load_diabetes()
df = Pd.Dataframe (diabicites.data, Columns =
                   diabicites.feature_names)
df ['target'] = diabicites.target
Print ("sample")
Print ("df.head()]
```

3) file.Path = '/content / sample_data /
California.csv')

```
df = Pd.read_csv (file_Path)
Print = ("df.head()")
Print ("\n")
```

~~output~~

4) import Pandas as pd

```
df = Pd.read_csv ('/Content/Diabetes Dataset (2).csv.zip')
Print (df.head())
df.to_csv ('output.csv', index=false)
Print ("Data Saved to output.csv")
```

output:

IP	No_Patients	Gender	AGE	Urea	Cr
0	502	F	50	4.7	46
1	735	M	60	4.5	62
2	420	F	70	4.3	32
3	680	F	30	4.6	56
4	504	M	50	3.2	63

FG	HDL	BMI	CLASS
0	24.0	2.1	N
1	23.6	3.2	N
2	24.0	4.3	N
3	24.0	5.6	N
4	21.0	6.7	N

5) Stock Market Data Analysis

1) HDFC Bank Ltd. "ICICIBANK.ltd",
Kotak Mahindra Bank Ltd.

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

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

```
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 ("first 5 rows of dataset:")
Print (data.head())
Print ("In shape of dataset:")
Print (data.shape)
Print ("In Column names:")
Print (data.columns)
Print ("In summary Statistics for HDFC Bank:")
Print (data ["HDFCBANK.NS'].describe())
Print ("In summary Statistics for ICICI Bank:")
Print (data ['ICICIBANK.NS'].describe())
data ['HDFCBANK.NS'] ['Daily return'] = data
['HDFC BANK.NS'] ['close'].
pct_change()
```

```
plt.figure(figsize=(14,10))
plt.subplot(3,2,1)
data['HDFCBANK.NS']
plt.subplot(3,2,1)
data['ICICIBANK.NS']['Close'].plot(title="HDFCBANK - Closing P
data['HDFCBANK.NS'].to_csv("hdfc_bank_data.csv")
data['ICICIBANK.NS'].to_csv("icici_bank_data.csv")
print("\n Bank Stock data saved to csv file")
```

Output:

(1) import Pandas as pd

```
data = {
    name : [Alice, bob, Charlie, David]
    age : [25, 30, 40, 12]
    city : [New york, los angels, Chicago, Houston]
}
df = pd.Dataframe(data)
print("sample data:")
print(df.head())
```

Output:

	name	age	city
0	Alice	25	New yo
1	bob	30	Chicag

2) from sklearn.datasets import load_iris

```
iris = load_iris()
df = pd.DataFrame(iris.data, columns = iris.feature_names)
df['target'] = iris.target
print("sample data:")
print(df.head())
```

Output:

	Sepal length	Sepal width	Petal length
0	5.1	1.4	0.2
1	4.3	1.4	0.2

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