



Vidyavardhini's College of Engineering & Technology

Department of Computer Engineering

Experiment No. 11
Program to demonstrate data frame creation and Manipulation using Pandas
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Experiment No. 11

Title: Program to demonstrate data frame creation and Manipulation using Pandas

Aim: To study and implement data frame creation and Manipulation using Pandas

Objective: To introduce Pandas package for python

Theory:

Pandas is an open-source library that is built on top of NumPy library. It is a Python package that offers various data structures and operations for manipulating numerical data and time series. It is mainly popular for importing and analyzing data much easier. Pandas is fast and it has high-performance & productivity for users.

Code:

```
# import module

import pandas as pd

# assign dataset

df = pd.read_csv("country-codes.csv")

# display

print("Type-", type(df))
```



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Output :

```
1 Click here to ask Blackbox to help you code faster
2 # import module
3 import pandas as pd
4
5 # assign dataset
6 df = pd.read_csv("country-codes.csv")
7
8 # display
9 print("Type-", type(df))
```

Terminal Output:

```
PS C:\Users\VIDEY\New folder> python main.py
Type- <class 'pandas.core.frame.DataFrame'>
PS C:\Users\VIDEY\New folder>
```

Notification: Do you want to install the recommended 'Rainbow CSV' extension from mechatroner for country-codes.csv?

Conclusion:

Data analysis using NumPy and Pandas provides a comprehensive toolkit for exploring, cleaning, and deriving insights from datasets in Python. NumPy facilitates efficient numerical computations and array manipulation, while Pandas offers powerful data structures and functions for data manipulation and analysis. Together, they enable tasks such as data loading, summarization, missing value handling, and visualization, empowering analysts and data scientists to gain deeper understanding and make informed decisions based on their data.