

## ASSIGNMENT -1

1.Create a pandas dataframe (DataFrame name as 'df') with numpy random values (4 features and 4 observation)

```
Sol.import pandas as pd
import numpy as np
```

```
# Create a pandas DataFrame with numpy random values
data = np.random.rand(4, 4)
df = pd.DataFrame(data, columns=['Feature1', 'Feature2', 'Feature3', 'Feature4'])

print(df)
```

2.Rename the task-1 'df' dataframe column names to 'Random value 1', 'Random value 2', 'Random value 3' & 'Random value 4'

```
# Rename the columns of the DataFrame 'df'
df.columns = ['Random value 1', 'Random value 2', 'Random value 3', 'Random value 4']

print(df)
```

3.Find the descriptive statistics of the 'df' dataframe.

```
# Get descriptive statistics of the DataFrame 'df'
df.describe()
```

Check for the null values in 'df' and find the data type of the columns.

4. Check for null values in 'df' and find the data types of the columns

```
print(df.isnull().sum())
print(df.dtypes)
```

5.Display the 'Random value 2' & 'Random value 3' columns with location method and index location method.

```
# Display 'Random value 2' & 'Random value 3' columns using loc and iloc methods
print(df.loc[:, ['Random value 2', 'Random value 3']])
print(df.iloc[:, [1, 2]])
```