In [1]:
```
# Day 57 - Introduction to Pandas: Series & DataFrames
# ----------------------------------------------------

import pandas as pd
```

In [2]:
```
# Step 1: Check Pandas version
print("Pandas Version:", pd.__version__)
```

```
Pandas Version: 2.3.3
```

In [3]:
```
# Step 2: Creating a Series (1D data)
s = pd.Series([10, 20, 30, 40, 50], index=['A', 'B', 'C', 'D', 'E'])
print("\nSeries Example:\n", s)
```

```
Series Example:
 A    10
B    20
C    30
D    40
E    50
dtype: int64
```

In [4]:
```
# Step 3: Creating a DataFrame (2D data)
data = {
    'Name': ['Jabbar', 'Saketh', 'Ranga', 'Ankit'],
    'Subject': ['Python', 'Java', 'C', 'AI'],
    'Marks': [90, 85, 88, 92]
}
```

In [5]:
```
df = pd.DataFrame(data)
print("\nDataFrame Example:\n", df)
```

```
DataFrame Example:
      Name Subject  Marks
0  Jabbar  Python     90
1  Saketh    Java     85
2   Ranga       C     88
3   Ankit      AI     92
```

In [6]:
```
# Step 4: Accessing DataFrame Information
print("\nShape of DataFrame:", df.shape)
print("Columns:", df.columns)
print("First 2 Rows:\n", df.head(2))
```

```
Shape of DataFrame: (4, 3)
Columns: Index(['Name', 'Subject', 'Marks'], dtype='object')
First 2 Rows:
      Name Subject  Marks
0  Jabbar  Python     90
1  Saketh    Java     85
```

In [7]:
```
# Step 5: Accessing Specific Columns
print("\nNames Column:\n", df['Name'])
```

```
Names Column:
 0    Jabbar
1    Saketh
2     Ranga
3     Ankit
Name: Name, dtype: object
```

In [8]:
```python
# Step 6: Describe the numeric data
print("\nStatistical Summary:\n", df.describe())
```

```
Statistical Summary:
            Marks
count   4.000000
mean   88.750000
std     2.986079
min    85.000000
25%    87.250000
50%    89.000000
75%    90.500000
max    92.000000
```