Yash Kasare AI&DS -24

Experiment - 11

Data Series using Pandas

```python
import pandas as pd
```

Create a Series from list

```python
data_list = [10, 20, 30, 40, 50]
series1 = pd.Series(data_list)
print("Series from list:\n", series1)

Series from list:
 0    10
1    20
2    30
3    40
4    50
dtype: int64
```

Create a Series with custom indices

```python
custom_index = ['a', 'b', 'c', 'd', 'e']
series2 = pd.Series(data_list, index=custom_index)
print("Series with custom index:\n", series2)

Series with custom index:
 a    10
b    20
c    30
d    40
e    50
dtype: int64
```

Accessing elements

```python
print("Accessing element at index 'c':", series2['c'])

Accessing element at index 'c': 30
```

Performing operations on Series

```python
print("Adding 5 to each element:\n", series2 + 5)

Adding 5 to each element:
 a    15
b    25
```

```
c    35
d    45
e    55
dtype: int64
```

Create Series from a dictionary

```python
data_dict = {'Math': 80, 'Physics': 90, 'Chemistry': 85}
series3 = pd.Series(data_dict)
print("Series from dictionary:\n", series3)
```

```
Series from dictionary:
 Math         80
Physics      90
Chemistry    85
dtype: int64
```

Check basic statistics

```python
print("Maximum marks:", series3.max())
print("Subjects scored above 85: \n", series3[series3 > 85])
```

```
Maximum marks: 90
Subjects scored above 85:
 Physics    90
dtype: int64
```