

ASSIGNMENT (1)

HOW TO SORT AND RANK DATA

import pandas as pd

Create a Sample DataFrame

```
data = {'Name': ['Alice', 'Bob', 'Charlie', 'Daniel'], 'Age': [25, 35, 35, 48],  
        'Salary': [10000, 16000, 54000, 22000]}
```

```
df = pd.DataFrame(data)
```

Sorting by 'Age' in ascending order.

```
sorted_data = df.sort_values(by='Age', ascending=True)
```

Ranking the 'Age' Column.

```
df['Rank'] = df['Age'].rank(method='average')
```

```
print("Sorted Data:")
```

```
print(sorted_data)
```

```
print("\nRanked Data:")
```

```
print(df)
```

EXERCISE 2

MEAN, MEDIAN, CUMULATIVE SUM, minimum AND Maximum FOR SPECIFIC COLUMNS.

Import pandas as pd.

Create a Sample DataFrame.

```
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
```

```
df = pd.DataFrame(data).
```

Calculating mean, median, cumulative sum, min, and max for column 'A'.

```
mean-A = df['A'].mean()
```

```
median-A = df['A'].median()
```

```
cumsum-A = df['A'].cumsum()
```

```
min-A = df['A'].min()
```

```
max-A = df['A'].max()
```

```
print(f"Mean of Column 'A': {mean-A}")
```

```
print(f"Median of Column 'A': {median-A}")
```

```
print(f"Cumulative sum of Column 'A': {cumsum-A}")
```

```
print(f"Minimum Value in Column 'A': {min-A}")
```

```
print(f"Maximum Value in Column 'A': {max-A}")
```