

In [1]:

```
import pandas as pd
import numpy as np
```

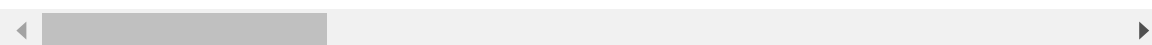
In [2]:

```
df=pd.read_csv("HR.csv")
df
```

Out[2]:

| | Age | Attrition | BusinessTravel | DailyRate | Department | DistanceFromHome | Education |
|------|-----|-----------|-------------------|-----------|------------------------|------------------|-----------|
| 0 | 41 | Yes | Travel_Rarely | 1102 | Sales | 1 | 2 |
| 1 | 49 | No | Travel_Frequently | 279 | Research & Development | 8 | 1 |
| 2 | 37 | Yes | Travel_Rarely | 1373 | Research & Development | 2 | 2 |
| 3 | 33 | No | Travel_Frequently | 1392 | Research & Development | 3 | 4 |
| 4 | 27 | No | Travel_Rarely | 591 | Research & Development | 2 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... |
| 1465 | 36 | No | Travel_Frequently | 884 | Research & Development | 23 | 2 |
| 1466 | 39 | No | Travel_Rarely | 613 | Research & Development | 6 | 1 |
| 1467 | 27 | No | Travel_Rarely | 155 | Research & Development | 4 | 3 |
| 1468 | 49 | No | Travel_Frequently | 1023 | Sales | 2 | 3 |
| 1469 | 34 | No | Travel_Rarely | 628 | Research & Development | 8 | 3 |

1470 rows × 35 columns



In [15]:

```
df.groupby('Department')['MonthlyIncome'].mean()
```

Out[15]:

```
Department
Human Resources    6654.507937
Research & Development  6281.252862
Sales              6959.172646
Name: MonthlyIncome, dtype: float64
```

In [16]:

```
df.groupby('Department')['MonthlyIncome'].median()
```

Out[16]:

```
Department
Human Resources      3886.0
Research & Development  4374.0
Sales                5754.5
Name: MonthlyIncome, dtype: float64
```

In [17]:

```
df.groupby('Department')['MonthlyIncome'].std()
```

Out[17]:

```
Department
Human Resources      5788.732921
Research & Development  4895.835087
Sales               4058.739322
Name: MonthlyIncome, dtype: float64
```

In [18]:

```
df.groupby('Department')['MonthlyIncome'].min()
```

Out[18]:

```
Department
Human Resources      1555
Research & Development  1009
Sales               1052
Name: MonthlyIncome, dtype: int64
```

In [39]:

```
df.groupby('Department')['MonthlyIncome'].max()
```

Out[39]:

```
Department
Human Resources      19717
Research & Development  19999
Sales               19847
Name: MonthlyIncome, dtype: int64
```

In [51]:

```
min_list=[i for i in df.groupby('Department')['MonthlyIncome'].min()]
max_list=[i for i in df.groupby('Department')['MonthlyIncome'].max()]
print(min_list,max_list)
```

```
[1555, 1009, 1052] [19717, 19999, 19847]
```

In []: