

```
In [1]: import pandas as pd
```

```
In [2]: data = {  
    'FamilyName': ['Shah', 'Vats', 'Vats', 'Kumar', 'Vats', 'Kumar', 'Shah',  
    'Gender': ['Male', 'Male', 'Female', 'Female', 'Female', 'Male', 'Male',  
    'MonthlyIncome (Rs.)': [44000.00, 65000.00, 43150.00, 66500.00, 255000.00,  
    ]  
}
```

```
In [3]: df = pd.DataFrame(data)
```

```
In [4]: df.head()
```

```
Out[4]:
```

	FamilyName	Gender	MonthlyIncome (Rs.)
0	Shah	Male	44000.0
1	Vats	Male	65000.0
2	Vats	Female	43150.0
3	Kumar	Female	66500.0
4	Vats	Female	255000.0

```
In [5]: highest_income = df.groupby('FamilyName')['MonthlyIncome (Rs.)'].max()  
lowest_income = df.groupby('FamilyName')['MonthlyIncome (Rs.)'].min()
```

```
In [6]: highest_income.head()
```

```
Out[6]: FamilyName  
Kumar    103000.0  
Shah     112400.0  
Vats     255000.0  
Name: MonthlyIncome (Rs.), dtype: float64
```

```
In [7]: income_80000 = df[df['MonthlyIncome (Rs.)'] < 80000.00]['MonthlyIncome (Rs.)']
```

```
In [8]: income_80000.head()
```

```
Out[8]: 0    44000.0  
1    65000.0  
2    43150.0  
3    66500.0  
6    55000.0  
Name: MonthlyIncome (Rs.), dtype: float64
```

```
In [19]: family_female = df[df['Gender'] == 'Female']  
total_females = len(family_female)
```

```
In [20]: print(family_female)
```

	FamilyName	Gender	MonthlyIncome (Rs.)
2	Vats	Female	43150.0
3	Kumar	Female	66500.0
4	Vats	Female	255000.0
7	Shah	Female	112400.0
8	Kumar	Female	81030.0

```
In [21]: family_female.count()
```

```
Out[21]:
```

FamilyName	5
Gender	5
MonthlyIncome (Rs.)	5

```
dtype: int64
```

```
In [23]: mean_female=family_female['MonthlyIncome (Rs.)'].mean()
```

```
In [24]: mean_female
```

```
Out[24]: 111616.0
```

```
In [26]: len(family_female)
```

```
Out[26]: 5
```

```
In [29]: avg_income_mem=df['MonthlyIncome (Rs.)'].mean()
```

```
In [31]: df=df[df['MonthlyIncome (Rs.)']>=avg_income_mem]
```

```
In [32]: df
```

```
Out[32]:
```

	FamilyName	Gender	MonthlyIncome (Rs.)
4	Vats	Female	255000.0
5	Kumar	Male	103000.0
7	Shah	Female	112400.0