# House Price Dataset Analysis

## 1. Sample Data (First 5 Rows)

print(df.head())

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| price | area | bedrooms | bathrooms | stories | mainroad | guestroom | basement | hotwaterheating | airconditioning | parking | prefarea | furnishingstatus |
| 13300000 | 7420 | 4 | 2 | 3 | yes | no | no | no | yes | 2 | yes | furnished |
| 12250000 | 8960 | 4 | 4 | 4 | yes | no | no | no | yes | 3 | no | furnished |
| 12250000 | 9960 | 3 | 2 | 2 | yes | no | yes | no | no | 2 | yes | semi-furnished |
| 12215000 | 7500 | 4 | 2 | 2 | yes | no | yes | no | yes | 3 | yes | furnished |
| 11410000 | 7420 | 4 | 1 | 2 | yes | yes | yes | no | yes | 2 | no | furnished |

## 2. Range (Max – Min)

range\_values = df.max(numeric\_only=True) - df.min(numeric\_only=True)  
print('Range:\n', range\_values, '\n')

|  |  |
| --- | --- |
| Feature | Range |
| price | 11550000 |
| area | 14550 |
| bedrooms | 5 |
| bathrooms | 3 |
| stories | 3 |
| parking | 3 |

## 3. Q1 (25th Percentile)

q1 = df.quantile(0.25, numeric\_only=True)  
print('Q1 (25th percentile):\n', q1, '\n')

|  |  |
| --- | --- |
| Feature | Q1 Value |
| price | 3430000 |
| area | 3600 |
| bedrooms | 2 |
| bathrooms | 1 |
| stories | 1 |
| parking | 0 |

## 4. Q3 (75th Percentile)

q3 = df.quantile(0.75, numeric\_only=True)  
print('Q3 (75th percentile):\n', q3, '\n')

|  |  |
| --- | --- |
| Feature | Q3 Value |
| price | 5740000 |
| area | 6360 |
| bedrooms | 3 |
| bathrooms | 2 |
| stories | 2 |
| parking | 1 |

## 5. Interquartile Range (IQR)

iqr = q3 - q1  
print('Interquartile Range (IQR):\n', iqr, '\n')

|  |  |
| --- | --- |
| Feature | IQR |
| price | 2310000 |
| area | 2760 |
| bedrooms | 1 |
| bathrooms | 1 |
| stories | 1 |
| parking | 1 |