

```
In [47]: import pandas as pd
```

```
In [59]: cars = pd.read_csv(r"C:\Users\Sai Deekshith\Downloads\file.csv")
```

```
In [60]: cars
```

Out[60]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

432 rows × 15 columns

In [61]: `cars.head(10)`

Out[61]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Horse |
|---|-------|-------------------------------|--------|--------|------------|----------|----------|------------|-----------|-------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| 5 | Acura | 3.5 RL w/Navigation 4dr | Sedan | Asia | Front | \$46,100 | \$41,100 | 3.5 | 6.0 | |
| 6 | Acura | NSX coupe 2dr manual S | Sports | Asia | Rear | \$89,765 | \$79,978 | 3.2 | 6.0 | |
| 7 | Audi | A4 1.8T 4dr | Sedan | Europe | Front | \$25,940 | \$23,508 | 1.8 | 4.0 | |
| 8 | Audi | A4 1.8T convertible 2dr | Sedan | Europe | Front | \$35,940 | \$32,506 | 1.8 | 4.0 | |
| 9 | Audi | A4 3.0 4dr | Sedan | Europe | Front | \$31,840 | \$28,846 | 3.0 | 6.0 | |

In [62]: `cars.tail(10)`

Out[62]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 422 | Volvo | S60 2.5 4dr | Sedan | Europe | All | \$31,745 | \$29,916 | 2.5 | 5.0 | |
| 423 | Volvo | S60 T5 4dr | Sedan | Europe | Front | \$34,845 | \$32,902 | 2.3 | 5.0 | |
| 424 | Volvo | S60 R 4dr | Sedan | Europe | All | \$37,560 | \$35,382 | 2.5 | 5.0 | |
| 425 | Volvo | S80 2.9 4dr | Sedan | Europe | Front | \$37,730 | \$35,542 | 2.9 | 6.0 | |
| 426 | Volvo | S80 2.5T 4dr | Sedan | Europe | All | \$37,885 | \$35,688 | 2.5 | 5.0 | |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

```
In [63]: cars.shape
```

Out[63]: (432, 15)

```
In [64]: cars.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 432 entries, 0 to 431
Data columns (total 15 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Make            428 non-null    object
1   Model           428 non-null    object
2   Type            428 non-null    object
3   Origin          428 non-null    object
4   DriveTrain      428 non-null    object
5   MSRP            428 non-null    object
6   Invoice         428 non-null    object
7   EngineSize      428 non-null    float64
8   Cylinders       426 non-null    float64
9   Horsepower      428 non-null    float64
10  MPG_City        428 non-null    float64
11  MPG_Highway     428 non-null    float64
12  Weight          428 non-null    float64
13  Wheelbase       428 non-null    float64
14  Length          428 non-null    float64
dtypes: float64(8), object(7)
memory usage: 50.8+ KB
```

```
In [65]: cars.describe()
```

Out[65]:

| | EngineSize | Cylinders | Horsepower | MPG_City | MPG_Highway | Weight | Wheelbase |
|-------|------------|------------|------------|------------|-------------|-------------|------------|
| count | 428.000000 | 426.000000 | 428.000000 | 428.000000 | 428.000000 | 428.000000 | 428.000000 |
| mean | 3.196729 | 5.807512 | 215.885514 | 20.060748 | 26.843458 | 3577.953271 | 108.154206 |
| std | 1.108595 | 1.558443 | 71.836032 | 5.238218 | 5.741201 | 758.983215 | 8.311813 |
| min | 1.300000 | 3.000000 | 73.000000 | 10.000000 | 12.000000 | 1850.000000 | 89.000000 |
| 25% | 2.375000 | 4.000000 | 165.000000 | 17.000000 | 24.000000 | 3104.000000 | 103.000000 |
| 50% | 3.000000 | 6.000000 | 210.000000 | 19.000000 | 26.000000 | 3474.500000 | 107.000000 |
| 75% | 3.900000 | 6.000000 | 255.000000 | 21.250000 | 29.000000 | 3977.750000 | 112.000000 |
| max | 8.300000 | 12.000000 | 500.000000 | 60.000000 | 66.000000 | 7190.000000 | 144.000000 |

```
In [77]: cars.isnull().sum()
```

```
Out[77]: Make          4
Model          4
Type           4
Origin         4
DriveTrain     4
MSRP           4
Invoice        4
EngineSize     4
Cylinders      6
Horsepower     4
MPG_City       4
MPG_Highway    4
Weight         4
Wheelbase      4
Length        4
dtype: int64
```

```
In [87]: cars['Make'].nunique()
```

Out[87]: 38

```
In [94]: cars['Cylinders'].fillna(cars['Cylinders'].mean(), inplace = True)
```

```
In [95]: cars
```

Out[95]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

432 rows × 15 columns



```
In [96]: cars.isnull().sum()
```

```
Out[96]: Make          4
Model          4
Type           4
Origin         4
DriveTrain     4
MSRP           4
Invoice        4
EngineSize     4
Cylinders      0
Horsepower     4
MPG_City       4
MPG_Highway    4
Weight         4
Wheelbase      4
Length        4
dtype: int64
```


```
In [97]: cars['Cylinders'].mean()
```

```
Out[97]: 5.807511737089202
```

```
In [98]: cars.head(2)
```

```
Out[98]:
```

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Horsepower |
|---|-------|-------------------|-------|--------|------------|----------|----------|------------|-----------|------------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | 265.0 |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | 200.0 |



```
In [99]: cars["Make"]
```

```
Out[99]: 0      Acura
1      Acura
2      Acura
3      Acura
4      Acura
...
427    Volvo
428    Volvo
429    Volvo
430    Volvo
431    Volvo
Name: Make, Length: 432, dtype: object
```

```
In [100]: cars["Make"].value_counts()
```

```
Out[100]: Toyota      28
Chevrolet    27
Mercedes-Benz 26
Ford         23
BMW          20
Audi         19
Honda        17
Nissan        17
Volkswagen   15
Chrysler     15
Dodge        13
Mitsubishi   13
Volvo        12
Jaguar        12
Hyundai       12
Subaru        11
Pontiac       11
Mazda         11
Lexus         11
Kia           11
Buick         9
Mercury       9
Lincoln       9
Saturn        8
Cadillac      8
Suzuki        8
Infiniti      8
GMC           8
Acura         7
Porsche       7
Saab          7
Land Rover    3
Oldsmobile    3
Jeep          3
Scion         2
Isuzu         2
MINI          2
Hummer        1
Name: Make, dtype: int64
```

```
In [107]: cars["Make"].value_counts().max()
```

```
Out[107]: 28
```

```
In [108]: cars["Make"].value_counts().min()
```

```
Out[108]: 1
```

```
In [109]: cars["Make"].value_counts().idxmin()
```

```
Out[109]: 'Hummer'
```

```
In [110]: cars["Make"].value_counts().idxmax()
```

```
Out[110]: 'Toyota'
```

```
In [111]: cars
```

```
Out[111]:
```

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

432 rows × 15 columns



```
In [114]: cars.Origin.value_counts()
```

```
Out[114]: Asia      158
          USA       147
          Europe    123
          Name: Origin, dtype: int64
```

```
In [115]: cars['Origin'].value_counts()
```

```
Out[115]: Asia      158
          USA       147
          Europe    123
          Name: Origin, dtype: int64
```

```
In [116]: cars.Origin.value_counts().idxmax()
```

```
Out[116]: 'Asia'
```

```
In [117]: cars.Origin.value_counts().idxmin()
```

```
Out[117]: 'Europe'
```

```
In [118]: cars.Origin
```

```
Out[118]: 0      Asia
          1      Asia
          2      Asia
          3      Asia
          4      Asia
          ...
         427    Europe
         428    Europe
         429    Europe
         430    Europe
         431    Europe
          Name: Origin, Length: 432, dtype: object
```

```
In [119]: cars.Origin.tail(10)
```

```
Out[119]: 422    Europe
          423    Europe
          424    Europe
          425    Europe
          426    Europe
          427    Europe
          428    Europe
          429    Europe
          430    Europe
          431    Europe
          Name: Origin, dtype: object
```

```
In [120]: cars.Origin.head(10)
```

```
Out[120]: 0      Asia
          1      Asia
          2      Asia
          3      Asia
          4      Asia
          5      Asia
          6      Asia
          7    Europe
          8    Europe
          9    Europe
          Name: Origin, dtype: object
```



```
In [126]: cars[cars.Origin.isin(['Asia', 'Europe'])]
```

Out[126]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

281 rows × 15 columns

```
In [127]: cars.head()
```

Out[127]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Horsepower |
|---|-------|----------------|-------|--------|------------|----------|----------|------------|-----------|------------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | 265.0 |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | 200.0 |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | 200.0 |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | 270.0 |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | 225.0 |

```
In [129]: cars.Weight
```

```
Out[129]: 0      4451.0
          1      2778.0
          2      3230.0
          3      3575.0
          4      3880.0
          ...
         427     3450.0
         428     3450.0
         429     3653.0
         430     2822.0
         431     3823.0
          Name: Weight, Length: 432, dtype: float64
```

```
In [130]: cars.Weight.mean()
```

```
Out[130]: 3577.9532710280373
```

```
In [132]: cars.Weight.head(10)
```

```
Out[132]: 0      4451.0
          1      2778.0
          2      3230.0
          3      3575.0
          4      3880.0
          5      3893.0
          6      3153.0
          7      3252.0
          8      3638.0
          9      3462.0
          Name: Weight, dtype: float64
```

```
In [133]: cars.Weight.tail(10)
```

```
Out[133]: 422     3903.0
          423     3766.0
          424     3571.0
          425     3576.0
          426     3691.0
          427     3450.0
          428     3450.0
          429     3653.0
          430     2822.0
          431     3823.0
          Name: Weight, dtype: float64
```

In [139]:

cars[~(cars.Weight > 4000)]

Out[139]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Ho |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|-----|
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| 5 | Acura | 3.5 RL w/Navigation 4dr | Sedan | Asia | Front | \$46,100 | \$41,100 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

329 rows × 15 columns

In [146]:

```
cars.drop(cars[cars.Weight > 4000].index)
```

Out[146]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Ho |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|-----|
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| 5 | Acura | 3.5 RL w/Navigation 4dr | Sedan | Asia | Front | \$46,100 | \$41,100 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

329 rows × 15 columns

In [147]:

cars

Out[147]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

432 rows × 15 columns

In [170]:

cars.MPG_City.apply(lambda x: x+3)

Out[170]:

| | |
|-----|------|
| 0 | 23.0 |
| 1 | 30.0 |
| 2 | 28.0 |
| 3 | 26.0 |
| 4 | 24.0 |
| ... | |
| 427 | 27.0 |
| 428 | 26.0 |
| 429 | 25.0 |
| 430 | 28.0 |
| 431 | 26.0 |

Name: MPG_City, Length: 432, dtype: float64

In [171]:

cars

Out[171]:

| | Make | Model | Type | Origin | DriveTrain | MSRP | Invoice | EngineSize | Cylinders | Hors |
|-----|-------|-------------------------|-------|--------|------------|----------|----------|------------|-----------|------|
| 0 | Acura | MDX | SUV | Asia | All | \$36,945 | \$33,337 | 3.5 | 6.0 | |
| 1 | Acura | RSX Type S 2dr | Sedan | Asia | Front | \$23,820 | \$21,761 | 2.0 | 4.0 | |
| 2 | Acura | TSX 4dr | Sedan | Asia | Front | \$26,990 | \$24,647 | 2.4 | 4.0 | |
| 3 | Acura | TL 4dr | Sedan | Asia | Front | \$33,195 | \$30,299 | 3.2 | 6.0 | |
| 4 | Acura | 3.5 RL 4dr | Sedan | Asia | Front | \$43,755 | \$39,014 | 3.5 | 6.0 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 427 | Volvo | C70 LPT convertible 2dr | Sedan | Europe | Front | \$40,565 | \$38,203 | 2.4 | 5.0 | |
| 428 | Volvo | C70 HPT convertible 2dr | Sedan | Europe | Front | \$42,565 | \$40,083 | 2.3 | 5.0 | |
| 429 | Volvo | S80 T6 4dr | Sedan | Europe | Front | \$45,210 | \$42,573 | 2.9 | 6.0 | |
| 430 | Volvo | V40 | Wagon | Europe | Front | \$26,135 | \$24,641 | 1.9 | 4.0 | |
| 431 | Volvo | XC70 | Wagon | Europe | All | \$35,145 | \$33,112 | 2.5 | 5.0 | |

432 rows × 15 columns

In []: