```
import pandas as pd
```

```
mpg = pd.read_csv('https://github.com/YBI-Foundation/Dataset/raw/main/MPG.csv')
```

```
mpg
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	origin
0	18.0	8	307.0	130.0	3504	12.0	70	usa
1	15.0	8	350.0	165.0	3693	11.5	70	usa
2	18.0	8	318.0	150.0	3436	11.0	70	usa
3	16.0	8	304.0	150.0	3433	12.0	70	usa
4	17.0	8	302.0	140.0	3449	10.5	70	usa
...	...	...	...	...	...	...	...	..
393	27.0	4	140.0	86.0	2790	15.6	82	usa

```
car = mpg.copy()
```

```
car
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	origin
0	18.0	8	307.0	130.0	3504	12.0	70	usa
1	15.0	8	350.0	165.0	3693	11.5	70	usa

```
mpg = mpg.drop('cylinders',axis = 1)
```

```
mpg.columns
```

```
Index(['mpg', 'displacement', 'horsepower', 'weight', 'acceleration',
       'model_year', 'origin', 'name'],
      dtype='object')
```

```
car.columns
```

```
Index(['mpg', 'cylinders', 'displacement', 'horsepower', 'weight',
       'acceleration', 'model_year', 'origin', 'name'],
      dtype='object')
```

```
car.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 398 entries, 0 to 397
Data columns (total 9 columns):
 #   Column        Non-Null Count  Dtype  
---  ------        --------------  -----  
 0   mpg           398 non-null    float64
 1   cylinders     398 non-null    int64  
 2   displacement  398 non-null    float64
 3   horsepower    392 non-null    float64
 4   weight        398 non-null    int64  
 5   acceleration  398 non-null    float64
 6   model_year    398 non-null    int64  
 7   origin        398 non-null    object 
 8   name          398 non-null    object 
dtypes: float64(4), int64(3), object(2)
memory usage: 28.1+ KB
```

```
car.describe()
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model
count	398.000000	398.000000	398.000000	392.000000	398.000000	398.000000	398.0
mean	23.514573	5.454774	193.425879	104.469388	2970.424623	15.568090	76.0
std	7.815984	1.701004	104.269838	38.491160	846.841774	2.757689	3.6
min	9.000000	3.000000	68.000000	46.000000	1613.000000	8.000000	70.0

```
car[['cylinders','origin']].value_counts()
```

```
cylinders  origin
8          usa       103
6          usa        74
4          usa        72
           japan      69
           europe     63
6          japan       6
3          japan       4
6          europe      4
5          europe      3
dtype: int64
```

```
car[['origin']].value_counts()
```

```
origin
usa       249
japan      79
europe     70
dtype: int64
```

```
car['origin'].unique()
```

```
array(['usa', 'japan', 'europe'], dtype=object)
```

```
car['origin'].nunique()
```

```
3
```

```
car.sort_values('displacement')
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	origin
117	29.0	4	68.0	49.0	1867	19.5	73	europe
71	19.0	3	70.0	97.0	2330	13.5	72	japan
111	18.0	3	70.0	90.0	2124	13.5	73	japan
334	23.7	3	70.0	100.0	2420	12.5	80	japan

```
car.sort_values('displacement',ascending = False)
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	origin
8	14.0	8	455.0	225.0	4425	10.0	70	usa
95	12.0	8	455.0	225.0	4951	11.0	73	usa
13	14.0	8	455.0	225.0	3086	10.0	70	usa
6	14.0	8	454.0	220.0	4354	9.0	70	usa
7	14.0	8	440.0	215.0	4312	8.5	70	usa
...	...	...	...	...	...	...	...	..

```
car.sort_values(['displacement','weight'],ascending = False)
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	origin
95	12.0	8	455.0	225.0	4951	11.0	73	usa
8	14.0	8	455.0	225.0	4425	10.0	70	usa

```
car.describe(include = 'all')
```

	mpg	cylinders	displacement	horsepower	weight	acceleration	mode
count	398.000000	398.000000	398.000000	392.000000	398.000000	398.000000	398.
unique	NaN	NaN	NaN	NaN	NaN	NaN	
top	NaN	NaN	NaN	NaN	NaN	NaN	
freq	NaN	NaN	NaN	NaN	NaN	NaN	
mean	23.514573	5.454774	193.425879	104.469388	2970.424623	15.568090	76.
std	7.815984	1.701004	104.269838	38.491160	846.841774	2.757689	3.
min	9.000000	3.000000	68.000000	46.000000	1613.000000	8.000000	70.
25%	17.500000	4.000000	104.250000	75.000000	2223.750000	13.825000	73.
50%	23.000000	4.000000	148.500000	93.500000	2803.500000	15.500000	76.
75%	29.000000	8.000000	262.000000	126.000000	3608.000000	17.175000	79.

```
car.T
```

	0	1	2	3	4	5	6	7	8
mpg	18.0	15.0	18.0	16.0	17.0	15.0	14.0	14.0	14.0
cylinders	8	8	8	8	8	8	8	8	8
displacement	307.0	350.0	318.0	304.0	302.0	429.0	454.0	440.0	455.0
horsepower	130.0	165.0	150.0	150.0	140.0	198.0	220.0	215.0	225.0
weight	3504	3693	3436	3433	3449	4341	4354	4312	4425
model_year	70	70	70	70	70	70	70	70	70
origin	usa	usa	usa	usa	usa	usa	usa	usa	usa
name	chevrolet chevelle malibu	buick skylark 320	plymouth satellite	amc rebel sst	ford torino	ford galaxie 500	chevrolet impala	plymouth fury iii	pontiac catalina

9 rows × 398 columns

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