```
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	ori
0	18.0	8	307.0	130.0	3504	12.0	70	
1	15.0	8	350.0	165.0	3693	11.5	70	
2	18.0	8	318.0	150.0	3436	11.0	70	
3	16.0	8	304.0	150.0	3433	12.0	70	
4	17.0	8	302.0	140.0	3449	10.5	70	
...	...	...	...	...	...	...	...	
393	27.0	4	140.0	86.0	2790	15.6	82	

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

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	ori

```
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	mo
count	398.000000	398.000000	398.000000	392.000000	398.000000	398.000000	3
mean	23.514573	5.454774	193.425879	104.469388	2970.424623	15.568090	
std	7.815984	1.701004	104.269838	38.491160	846.841774	2.757689	
min	9.000000	3.000000	68.000000	46.000000	1613.000000	8.000000	
25%	17.500000	4.000000	104.250000	75.000000	2223.750000	13.825000	
50%	23.000000	4.000000	148.500000	93.500000	2803.500000	15.500000	
75%	29.000000	8.000000	262.000000	126.000000	3608.000000	17.175000	
max	46.600000	8.000000	455.000000	230.000000	5140.000000	24.800000	

```
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
117	29.0	4	68.0	49.0	1867	19.5	73
71	19.0	3	70.0	97.0	2330	13.5	72
111	18.0	3	70.0	90.0	2124	13.5	73
334	23.7	3	70.0	100.0	2420	12.5	80
131	32.0	4	71.0	65.0	1836	21.0	74
...	...	...	...	...	...	...	...
94	13.0	8	440.0	215.0	4735	11.0	73

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

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

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

	mpg	cylinders	displacement	horsepower	weight	acceleration	model_year	ori
95	12.0	8	455.0	225.0	4951	11.0	73	
8	14.0	8	455.0	225.0	4425	10.0	70	
13	14.0	8	455.0	225.0	3086	10.0	70	
6	14.0	8	454.0	220.0	4354	9.0	70	
94	13.0	8	440.0	215.0	4735	11.0	73	
...	...	...	...	...	...	...	...	

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

	mpg	cylinders	displacement	horsepower	weight	acceleration	m
count	398.000000	398.000000	398.000000	392.000000	398.000000	398.000000	3
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	
std	7.815984	1.701004	104.269838	38.491160	846.841774	2.757689	
min	9.000000	3.000000	68.000000	46.000000	1613.000000	8.000000	
25%	17.500000	4.000000	104.250000	75.000000	2223.750000	13.825000	
50%	23.000000	4.000000	148.500000	93.500000	2803.500000	15.500000	
75%	29.000000	8.000000	262.000000	126.000000	3608.000000	17.175000	

```
car.T
```

	0	1	2	3	4	5	6	7	
mpg	18.0	15.0	18.0	16.0	17.0	15.0	14.0	14.0	
cylinders	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	4
horsepower	130.0	165.0	150.0	150.0	140.0	198.0	220.0	215.0	2
weight	3504	3693	3436	3433	3449	4341	4354	4312	
acceleration	12.0	11.5	11.0	12.0	10.5	10.0	9.0	8.5	
model_year	70	70	70	70	70	70	70	70	
origin	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	pc cat

9 rows × 398 columns

Double-click (or enter) to edit

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