

```
import seaborn as sns
```

▼ Working on Data set from seaBorn Library

```
df=sns.load_dataset("tips")
df
```

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

244 rows × 7 columns

▼ Checking information about Data

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 244 entries, 0 to 243
Data columns (total 7 columns):
#   Column      Non-Null Count  Dtype
---  ---
0   total_bill  244 non-null    float64
1   tip         244 non-null    float64
2   sex         244 non-null    category
3   smoker      244 non-null    category
4   day         244 non-null    category
5   time        244 non-null    category
6   size        244 non-null    int64
dtypes: category(4), float64(2), int64(1)
memory usage: 7.4 KB
```

▼ Checking First 5 Entries

```
df.head()
```

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

▼ Checking Last 5 Entries

```
df.tail()
```

	total_bill	tip	sex	smoker	day	time	size
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

Summary Statics

```
df.describe()
```

	total_bill	tip	size
count	244.000000	244.000000	244.000000
mean	19.785943	2.998279	2.569672
std	8.902412	1.383638	0.951100
min	3.070000	1.000000	1.000000
25%	13.347500	2.000000	2.000000
50%	17.795000	2.900000	2.000000
75%	24.127500	3.562500	3.000000
max	50.810000	10.000000	6.000000

▼ Checking No.of Rows and Columns

```
df.shape
```

```
(244, 7)
```

```
df.shape[0]
```

```
244
```

```
df.shape[1]
```

```
7
```

▼ Checking Columns Names

```
df.columns
```

```
Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')
```

▼ Checking Row Heading

```
df.index
```

```
RangeIndex(start=0, stop=244, step=1)
```

▼ Removing Specific Column

```
df1=df.drop(["smoker", "day"], axis=1)
df1
```

	total_bill	tip	sex	time	size
0	16.99	1.01	Female	Dinner	2
1	10.34	1.66	Male	Dinner	3
2	21.01	3.50	Male	Dinner	3
3	23.68	3.31	Male	Dinner	2
4	24.59	3.61	Female	Dinner	4
...
239	29.03	5.92	Male	Dinner	3
240	27.18	2.00	Female	Dinner	2
241	22.67	2.00	Male	Dinner	2
...

▼ Checking Missing Values

244 rows x 5 columns

```
df.isnull().sum()
```

```
total_bill    0
tip           0
sex           0
smoker        0
day           0
time          0
size          0
dtype: int64
```

▼ Checking Unique Values

```
df.smoker.unique()
```

```
['No', 'Yes']
Categories (2, object): ['Yes', 'No']
```

▼ Checking

```
df.groupby(["day"]).mean()
```

```
<ipython-input-21-702cd3b0cc66>:1: FutureWarning: The default value of numeric_only in [
df.groupby(["day"]).mean()
```

```
      total_bill      tip      size
day
Thur   17.682742   2.771452  2.451613
Fri    17.151579   2.734737  2.105263
Sat    20.441379   2.993103  2.517241
Sun    21.410000   3.255132  2.842105
```

