

```
import pandas as pd

tips=pd.read_csv('https://github.com/YBI-Foundation/Dataset/raw/main/Tips%20Payment%20Data

tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC Number
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	Christy Cunningham	356032516860
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	Douglas Tucker	447807137970
									Travis	

```
tips['Tip']/tips['Total Bill']*100
```

0	5.944673
1	16.054159
2	16.658734
3	13.978041
4	14.680765
	...
239	20.392697
240	7.358352
241	8.822232
242	9.820426
243	15.974441
Length: 244, dtype: float64	

```
tip_percentage=tips['Tip']/tips['Total Bill']*100
```

```
tip_percentage
```

0	5.944673
1	16.054159
2	16.658734
3	13.978041
4	14.680765
	...
239	20.392697
240	7.358352
241	8.822232
242	9.820426
243	15.974441
Length: 244, dtype: float64	

```
tips['tip_percentage']=tips['Tip']/tips['Total Bill']*100
```

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC Number
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	Christy Cunningham	3560325168603410
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	Douglas Tucker	4478071379779230
									Travis	

```
tips['tip_percentage']=tips['tip_percentage'].round(1)
```

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC Number
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	Christy Cunningham	3560325168603410
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	Douglas Tucker	4478071379779230
									Travis	

```
tips=tips.drop(['Payer Name'],axis=1)
```

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	Payment ID
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	Sun2916
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230	Sun4616
2	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320	Sun4416
3	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990	Sun5216

```
tips.set_index('Payment ID')
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number
Payment ID									
Sun2959	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410
Sun4608	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230
Sun4458	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320
Sun5260	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990
Sun2251	24.59	3.61	Female	No	Sun	Dinner	4	6.15	4832732618637220
...
Sat2657	20.02	5.02	Male	No	Sat	Dinner	3	6.68	5206068606052810

tips.head()

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	Payment ID
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	Sun2959
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230	Sun4608
2	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320	Sun4458
3	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990	Sun5260

tips=tips.set_index('Payment ID')

tips.head()

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	ti
Payment ID										
Sun2959	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	
Sun4608	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230	
Sun4458	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320	

tips=tips.reset_index()

tips.head()



	Payment ID	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number
0	Sun2959	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410
1	Sun4608	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230
2	Sun4458	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320
3	Sun5260	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990

✓ 0s completed at 4:25 PM

