```python
import pandas as pd
```

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

```python
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC Nu
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	447807137977
									Travis	

```python
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
```

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

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

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC N(
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	447807137977
									Travis	

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

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	Payer Name	CC N(
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	447807137977
									Travis	

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

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	Paymer
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	Sun29!
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230	Sun46(
2	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320	Sun44!
3	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990	Sun52(

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

Payment ID	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number
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	29.03	5.92	Male	No	Sat	Dinner	3	9.68	5296068606052840
Sat1766	27.18	2.00	Female	Yes	Sat	Dinner	2	13.59	3506806155565400
Sat3880	22.67	2.00	Male	Yes	Sat	Dinner	2	11.34	6011891618747190
Sat17	17.82	1.75	Male	No	Sat	Dinner	2	8.91	4375220550950

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	Paymer
0	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	Sun29!
1	10.34	1.66	Male	No	Sun	Dinner	3	3.45	4478071379779230	Sun46(
2	21.01	3.50	Male	No	Sun	Dinner	3	7.00	6011812112971320	Sun44!
3	23.68	3.31	Male	No	Sun	Dinner	2	11.84	4676137647685990	Sun52(

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

```
tips.head()
```

	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	tips_

```
tips = tips.reset_index()
```

Sun2959	16.99	1.01	Female	No	Sun	Dinner	2	8.49	3560325168603410	

```
tips.head()
```

	Payment ID	Total Bill	Tip	Gender	Smoker	Day	Time	Size	Bill Per Person	CC Number	ti
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	

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