

22/07/23 tony5

```
In [103]: import numpy as np
import pandas as pd
import matplotlib.pyplot as pp
```

```
In [104]: x=pd.read_csv(r"C:\Users\user\Downloads\3_Fitness-1.csv")
x
```

Out[104]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	A	5.62%	7.73%	6.16%	75
1	B	4.21%	17.27%	19.21%	160
2	C	9.83%	11.60%	5.17%	101
3	D	2.81%	21.91%	7.88%	127
4	E	25.28%	10.57%	11.82%	179
5	F	8.15%	16.24%	18.47%	167
6	G	18.54%	8.76%	17.49%	171
7	H	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

```
In [105]: x. dtypes
```

```
Out[105]: Row Labels          object
Sum of Jan          object
Sum of Feb          object
Sum of Mar          object
Sum of Total Sales  int64
dtype: object
```

```
In [106]: x. dtypes
```

```
Out[106]: Row Labels          object
Sum of Jan          object
Sum of Feb          object
Sum of Mar          object
Sum of Total Sales  int64
dtype: object
```

In [107]: `x.tail()`

Out[107]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
4	E	25.28%	10.57%	11.82%	179
5	F	8.15%	16.24%	18.47%	167
6	G	18.54%	8.76%	17.49%	171
7	H	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

In [108]: `x.columns`

Out[108]: Index(['Row Labels', 'Sum of Jan', 'Sum of Feb', 'Sum of Mar',
'Sum of Total Sales'],
dtype='object')

In [109]: `x.index`

Out[109]: RangeIndex(start=0, stop=9, step=1)

In [110]: `x.describe()`

Out[110]:

	Sum of Total Sales
count	9.000000
mean	255.555556
std	337.332963
min	75.000000
25%	127.000000
50%	167.000000
75%	171.000000
max	1150.000000

In [131]: `x["Row Labels"]`

Out[131]:

0	A
1	B
2	C
3	D
4	E
5	F
6	G
7	H
8	Grand Total

Name: Row Labels, dtype: object

```
In [112]: x.iloc[0:2]
```

```
Out[112]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	A	5.62%	7.73%	6.16%	75
1	B	4.21%	17.27%	19.21%	160

```
In [113]: x.loc[0:3]
```

```
Out[113]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	A	5.62%	7.73%	6.16%	75
1	B	4.21%	17.27%	19.21%	160
2	C	9.83%	11.60%	5.17%	101
3	D	2.81%	21.91%	7.88%	127

```
In [115]: x.loc["Sum of Jan":"Sum of Feb"]
```

```
Out[115]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
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```
In [116]: x[x["Sum of Total Sales"]<=20]
```

```
Out[116]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
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```
In [117]: x.fillna(value=5)
```

```
Out[117]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	A	5.62%	7.73%	6.16%	75
1	B	4.21%	17.27%	19.21%	160
2	C	9.83%	11.60%	5.17%	101
3	D	2.81%	21.91%	7.88%	127
4	E	25.28%	10.57%	11.82%	179
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6	G	18.54%	8.76%	17.49%	171
7	H	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

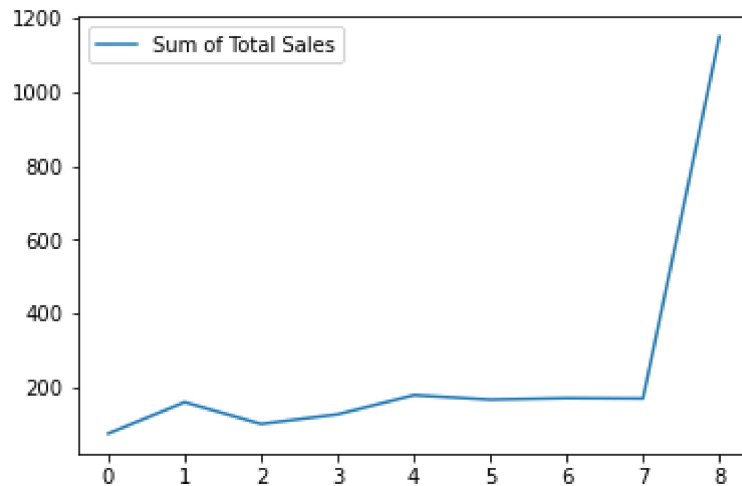
```
In [118]: x.dropna()
```

```
Out[118]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	A	5.62%	7.73%	6.16%	75
1	B	4.21%	17.27%	19.21%	160
2	C	9.83%	11.60%	5.17%	101
3	D	2.81%	21.91%	7.88%	127
4	E	25.28%	10.57%	11.82%	179
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6	G	18.54%	8.76%	17.49%	171
7	H	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

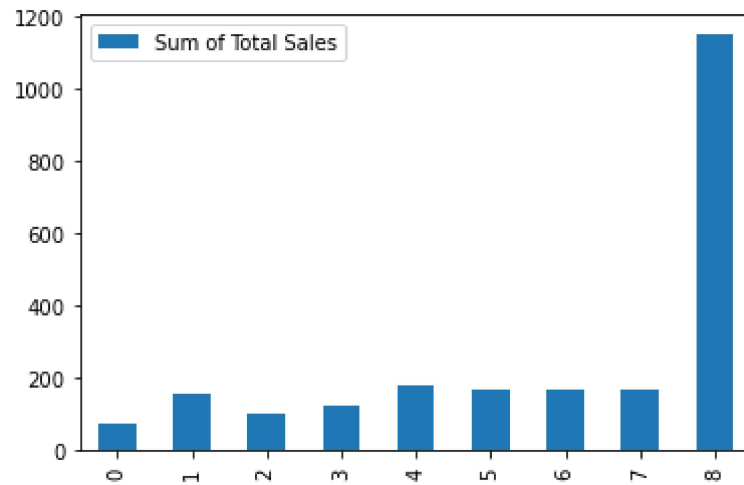
```
In [119]: x.plot.line()
```

```
Out[119]: <AxesSubplot:>
```



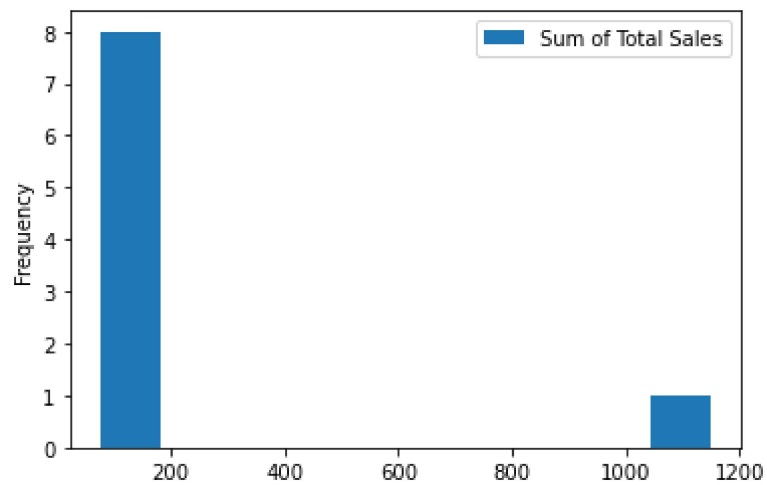
```
In [120]: x.plot.bar()
```

```
Out[120]: <AxesSubplot:>
```



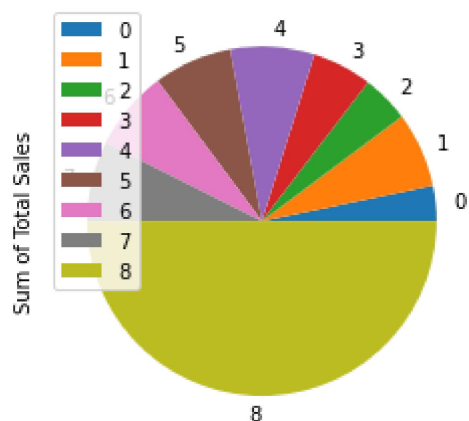
```
In [122]: x.plot.hist()
```

```
Out[122]: <AxesSubplot:ylabel='Frequency'>
```



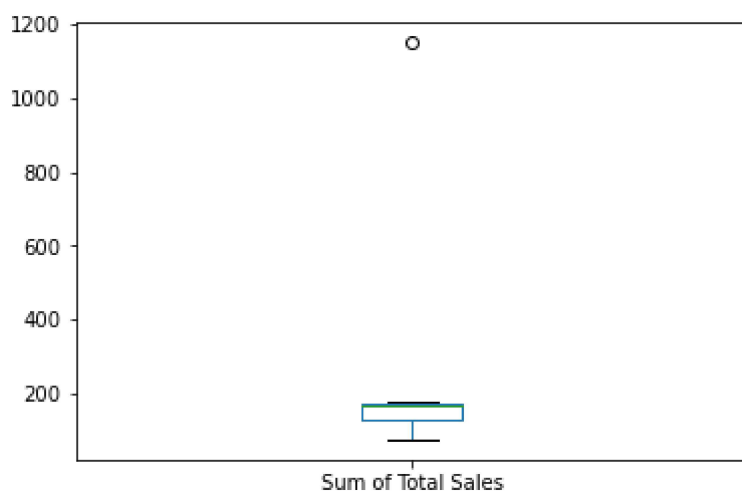
```
In [130]: x.plot.pie(y='Sum of Total Sales')
```

```
Out[130]: <AxesSubplot:ylabel='Sum of Total Sales'>
```



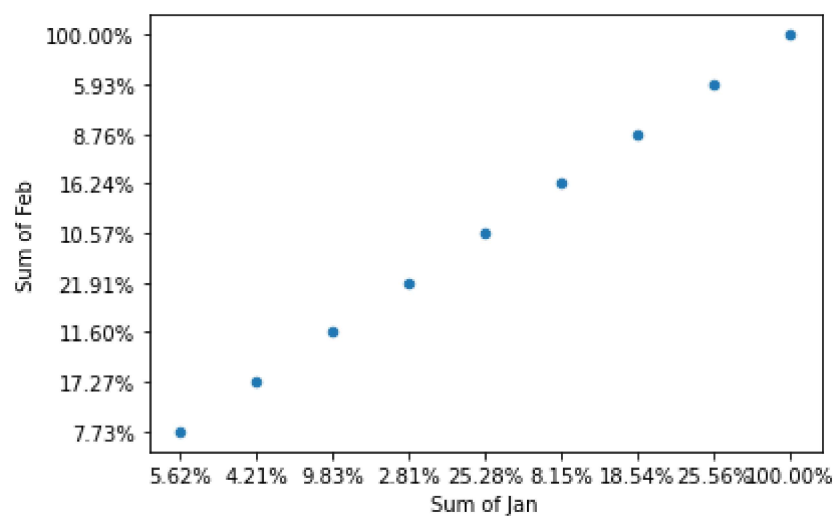
```
In [129]: x.plot.box()
```

```
Out[129]: <AxesSubplot:>
```



```
In [126]: x.plot.scatter(x='Sum of Jan',y='Sum of Feb')
```

```
Out[126]: <AxesSubplot:xlabel='Sum of Jan', ylabel='Sum of Feb'>
```



```
In [ ]:
```

```
In [ ]:
```