## fitness Data set

# import labary

In [1]: import numpy as np
import pandas as pd

Import dataset

#### Out[2]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	А	5.62%	7.73%	6.16%	75
1	В	4.21%	17.27%	19.21%	160
2	С	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	Н	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

Print head first 20 rows

In [3]: data.head(10)

#### Out[3]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	А	5.62%	7.73%	6.16%	75
1	В	4.21%	17.27%	19.21%	160
2	С	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	Н	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

#### Print tail last 7 rows

In [4]: data.tail(20)

Out[4]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	Α	5.62%	7.73%	6.16%	75
1	В	4.21%	17.27%	19.21%	160
2	С	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	Н	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

To print statistical data

In [5]: data.describe()

Out[5]:

#### **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

To print rows and coloum

In [6]: np.shape(data)

Out[6]: (9, 5)

To print no. of elements

In [7]: np.size(data)

Out[7]: 45

### To print missing values

In [8]: data.isna()

### Out[8]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	False	False	False	False	False
1	False	False	False	False	False
2	False	False	False	False	False
3	False	False	False	False	False
4	False	False	False	False	False
5	False	False	False	False	False
6	False	False	False	False	False
7	False	False	False	False	False
8	False	False	False	False	False

In [9]: data.dropna()

## Out[9]:

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
0	А	5.62%	7.73%	6.16%	75
1	В	4.21%	17.27%	19.21%	160
2	С	9.83%	11.60%	5.17%	101
3	D	2.81%	21.91%	7.88%	127
4	Е	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	Н	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

```
In [10]: dd=data[['Sum of Jan','Sum of Total Sales']]
dd
```

#### Out[10]:

	Sum of Jan	Sum of Total Sales
0	5.62%	75
1	4.21%	160
2	9.83%	101
3	2.81%	127
4	25.28%	179
5	8.15%	167
6	18.54%	171
7	25.56%	170
8	100.00%	1150

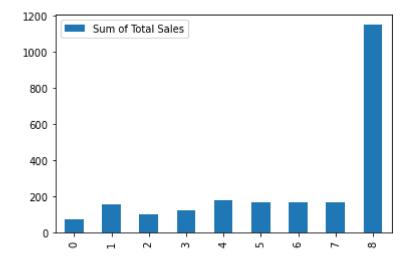
In [11]: import matplotlib.pyplot as pp

#### Out[12]:

	Sum of Jan	Sum of Total Sales
0	5.62%	75
1	4.21%	160
2	9.83%	101
3	2.81%	127
4	25.28%	179
5	8.15%	167
6	18.54%	171
7	25.56%	170
8	100.00%	1150

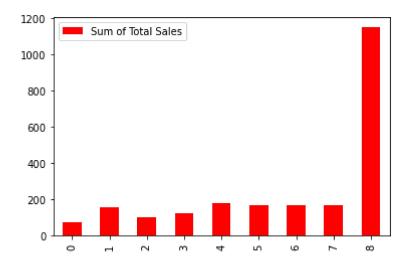
```
In [13]: dd.plot.bar()
```

### Out[13]: <AxesSubplot:>



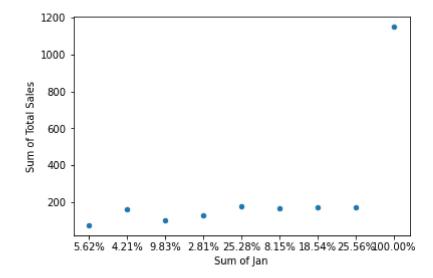
In [14]: dd.plot.bar(color='r')

### Out[14]: <AxesSubplot:>



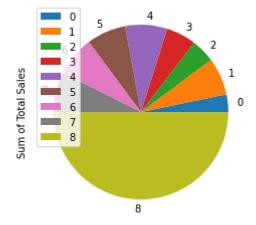
```
In [15]: dd.plot.scatter(x='Sum of Jan',y='Sum of Total Sales')
```

Out[15]: <AxesSubplot:xlabel='Sum of Jan', ylabel='Sum of Total Sales'>



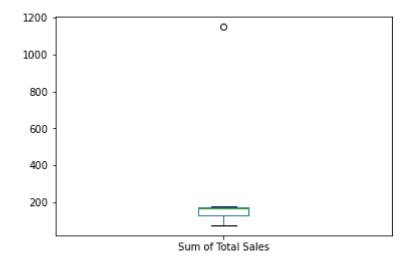
```
In [16]: dd.plot.pie(y='Sum of Total Sales')
```

Out[16]: <AxesSubplot:ylabel='Sum of Total Sales'>



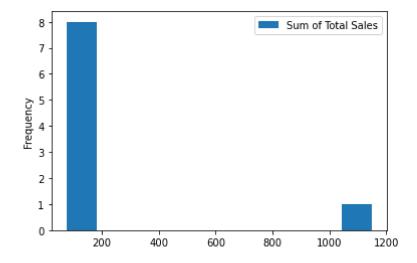
```
In [17]: dd.plot.box()
```

### Out[17]: <AxesSubplot:>



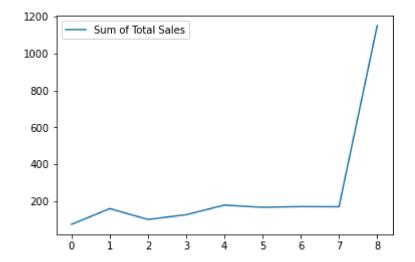
In [18]: dd.plot.hist()

Out[18]: <AxesSubplot:ylabel='Frequency'>



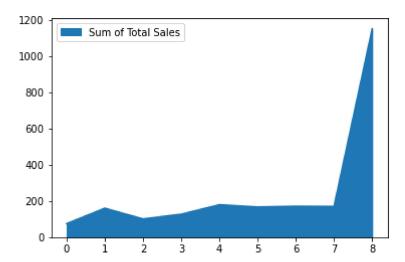
```
In [19]: dd.plot.line()
```

### Out[19]: <AxesSubplot:>



In [20]: dd.plot.area()

### Out[20]: <AxesSubplot:>



```
In [21]: dd.plot.bar()
```

### Out[21]: <AxesSubplot:>

