

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

## IMPORT AND PRINT DATA SET

```
In [2]: data = pd.read_csv("fitness.csv")  
data
```

```
Out[2]:
```

	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

## SHAPE

```
In [3]: np.shape(data)
```

```
Out[3]: (9, 5)
```

## SIZE

```
In [4]: np.size(data)
```

```
Out[4]: 45
```

## PRINT FIRST 10 VALUES

```
In [5]: data.head(10)
```

```
Out[5]:
```

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
--	------------	------------	------------	------------	--------------------

	Row Labels	Sum of Jan	Sum of Feb	Sum of Mar	Sum of Total Sales
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6	G	18.54%	8.76%	17.49%	171
7	H	25.56%	5.93%	13.79%	170

## PRINT LAST 7 VALUES

In [6]:

```
data.tail(5)
```

Out[6]:

	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

## DESCRIPTION OF TABLE

In [7]:

```
data.describe()
```

Out[7]:

	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

## FIND NULL 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

## FILL NULL VALUES

```
In [9]: data.fillna(1)
```

```
Out[9]:
```

	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 [10]: data.columns
```

```
Out[10]: Index(['Row Labels', 'Sum of Jan', 'Sum of Feb', 'Sum of Mar',  
               'Sum of Total Sales'],  
              dtype='object')
```

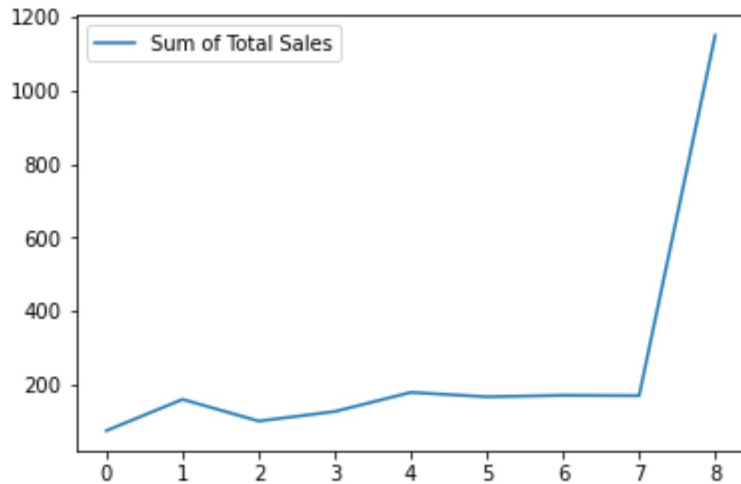
```
In [11]: data.index
```

```
Out[11]: RangeIndex(start=0, stop=9, step=1)
```

## LINE PLOT

```
In [12]: data.plot.line()
```

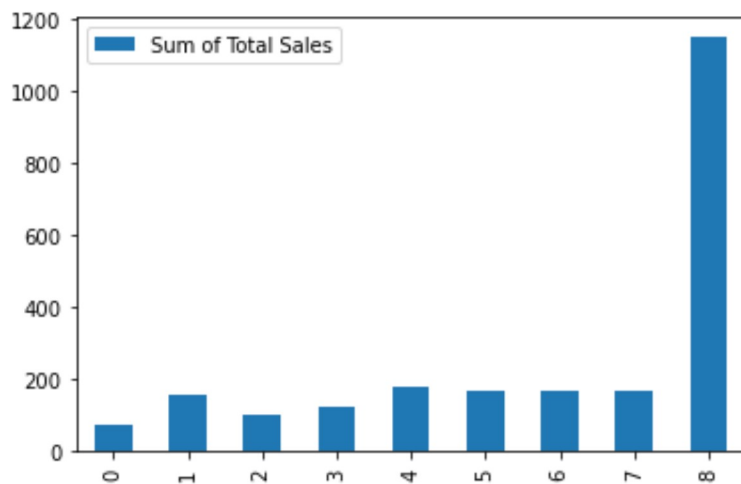
```
Out[12]: <AxesSubplot:>
```



## BAR CHART

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

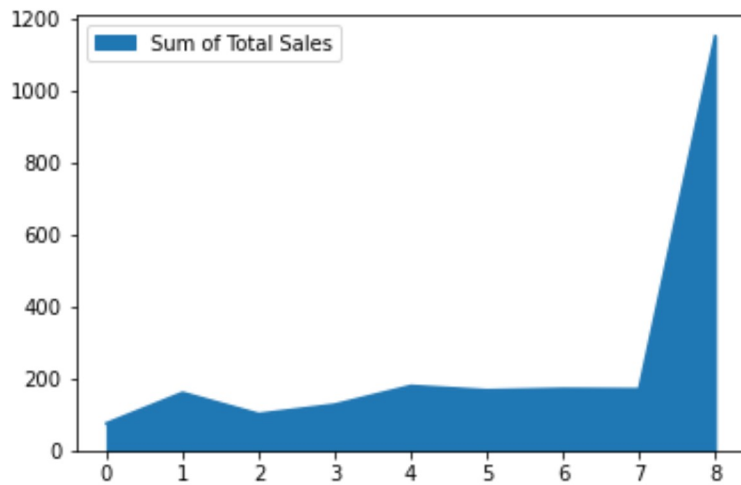
```
Out[13]: <AxesSubplot:>
```



## AREA CHART

```
In [14]: data.plot.area()
```

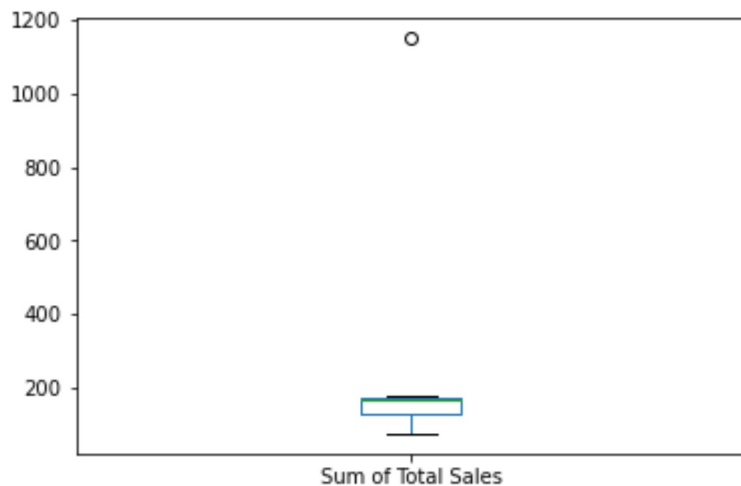
```
Out[14]: <AxesSubplot:>
```



## BOX PLOT

```
In [15]: data.plot.box()
```

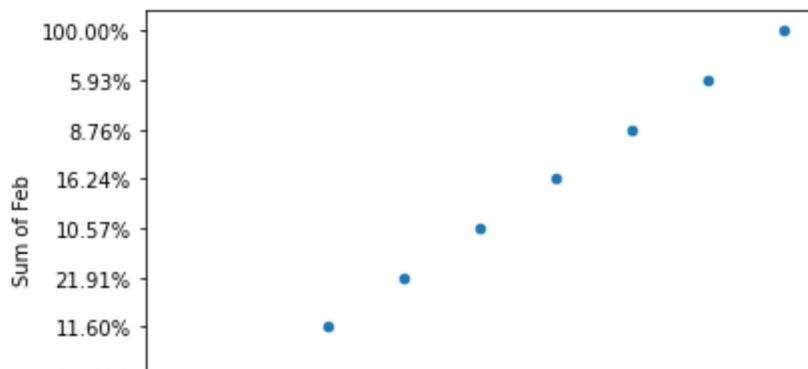
```
Out[15]: <AxesSubplot:>
```



## SCATTER PLOT

```
In [17]: data.plot.scatter(x = "Sum of Jan", y = "Sum of Feb" )
```

```
Out[17]: <AxesSubplot:xlabel='Sum of Jan', ylabel='Sum of Feb'>
```



## PIE CHART

```
In [19]: data.plot.pie(y = "Sum of Total Sales")
```

```
Out[19]: <AxesSubplot:ylabel='Sum of Total Sales'>
```

