# Data set 4

## In [1]:

import numpy as np
import pandas as pd

#### In [2]:

```
a=pd.read_csv(r"C:\Users\user\Downloads\3_Fitness-1.csv")
```

To print top rows:

## In [3]:

a.head()

## Out[3]:

	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	Е	25.28%	10.57%	11.82%	179

To print Last rows:

#### In [7]:

a.tail()

#### Out[7]:

	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	Н	25.56%	5.93%	13.79%	170
8	Grand Total	100.00%	100.00%	100.00%	1150

Statistical Summary:

## In [8]:

# a.describe()

# Out[8]:

#### **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 no of rows and columns

# In [9]:

```
a.shape
```

## Out[9]:

(9, 5)

To print no of elements

# In [11]:

```
a.size
```

## Out[11]:

45

Missing no of values

#### In [12]:

a.isna()

#### Out[12]:

	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 [13]:

```
conda install matplotlib
```

Collecting package metadata (current\_repodata.json): ...working... done Solving environment: ...working... done

# All requested packages already installed.

Note: you may need to restart the kernel to use updated packages.

==> WARNING: A newer version of conda exists. <==

current version: 4.10.1
latest version: 23.5.2

Please update conda by running

\$ conda update -n base -c defaults conda

#### In [14]:

import matplotlib.pyplot as pp

## In [16]:

```
b=a[['Sum of Jan','Sum of Feb']]
b
```

## Out[16]:

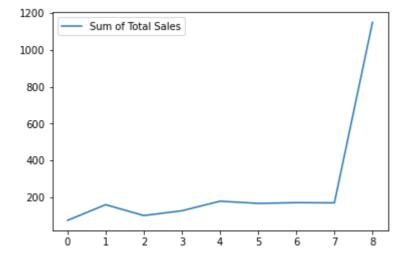
	Sum of Jan	Sum of Feb
0	5.62%	7.73%
1	4.21%	17.27%
2	9.83%	11.60%
3	2.81%	21.91%
4	25.28%	10.57%
5	8.15%	16.24%
6	18.54%	8.76%
7	25.56%	5.93%
8	100.00%	100.00%

# In [17]:

# a.plot.line()

# Out[17]:

## <AxesSubplot:>

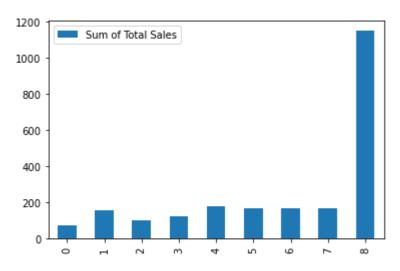


#### In [18]:

a.plot.bar()

# Out[18]:

# <AxesSubplot:>

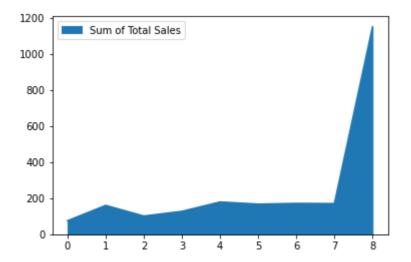


# In [19]:

a.plot.area()

## Out[19]:

## <AxesSubplot:>

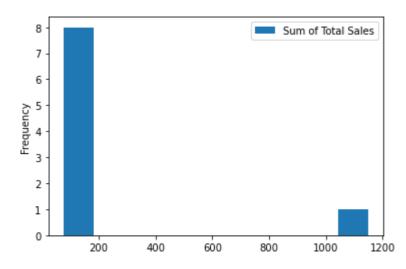


# In [20]:

a.plot.hist()

# Out[20]:

<AxesSubplot:ylabel='Frequency'>

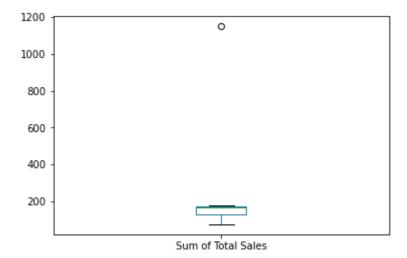


# In [21]:

a.plot.box()

## Out[21]:

## <AxesSubplot:>

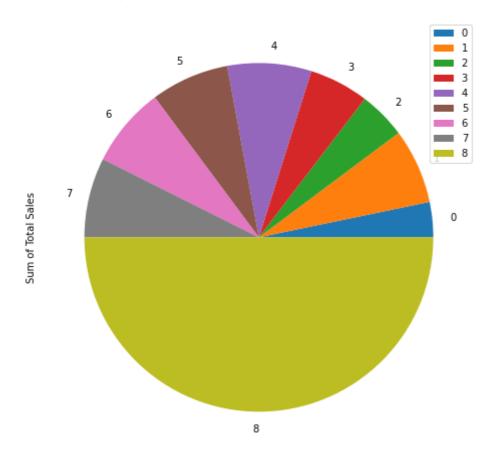


#### In [22]:

```
a.plot.pie(y='Sum of Total Sales',figsize=(8,8))
```

#### Out[22]:

<AxesSubplot:ylabel='Sum of Total Sales'>

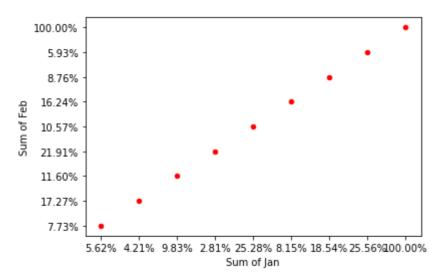


#### In [23]:

```
a.plot.scatter(x='Sum of Jan',y='Sum of Feb',color='r')
```

### Out[23]:

<AxesSubplot:xlabel='Sum of Jan', ylabel='Sum of Feb'>



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