

In [1]:

```
import numpy as np
import pandas as pd
```

In [2]:

```
a=pd.read_csv(r"C:\Users\user\Downloads\Fitness (2).csv")
```

To print the first 10 rows

In [3]:

```
a.head(10)
```

Out[3]:

|   | 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               |

To print the last 5 rows

In [4]:

```
a.tail(5)
```

Out[4]:

|   | 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               |

To print the size function

In [5]:

```
print(np.size(a))
```

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To print shape function

In [6]:

```
print(np.shape(a))
```

(9, 5)

To print the na function

In [7]:

```
pd.isna(a)
```

Out[7]:

|   | 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              |

To print the na function

In [8]:

```
pd.isna(a)
```

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              |

To print the na function

In [9]:

```
pd.isna(a)
```

Out[9]:

|   | 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              |

To print the drop function

In [10]:

```
a.dropna()
```

Out[10]:

|   | 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               |

To print the fill function

In [11]:

```
a.fillna(value=10)
```

Out[11]:

|   | 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               |

To describe the function

In [12]:

```
a.describe()
```

Out[12]:

| 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 [13]:

```
conda install matplotlib
```

```
Collecting package metadata (current_repodata.json): ...working... done  
Solving environment: ...working... done
```

Note: you may need to restart the kernel to use updated packages.# All requested packages already installed.

```
==> 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[["Row Labels","Sum of Total Sales"]]  
b
```

Out[16]:

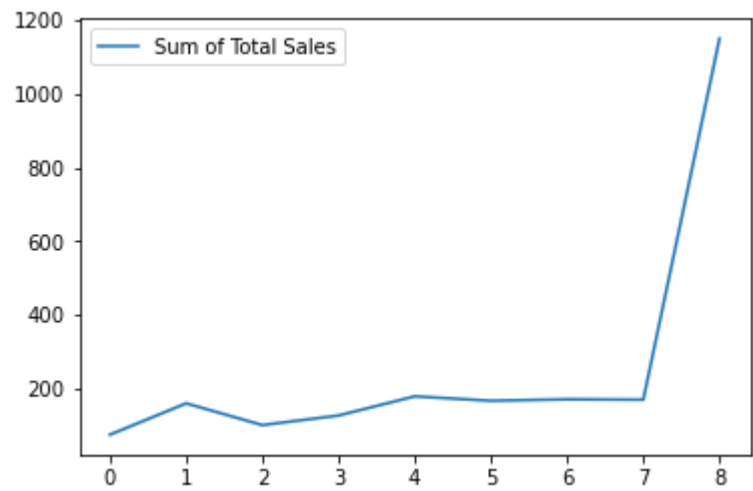
|   | Row Labels  | Sum of Total Sales |
|---|-------------|--------------------|
| 0 | A           | 75                 |
| 1 | B           | 160                |
| 2 | C           | 101                |
| 3 | D           | 127                |
| 4 | E           | 179                |
| 5 | F           | 167                |
| 6 | G           | 171                |
| 7 | H           | 170                |
| 8 | Grand Total | 1150               |

In [17]:

```
b.plot.line()
```

Out[17]:

<AxesSubplot:>

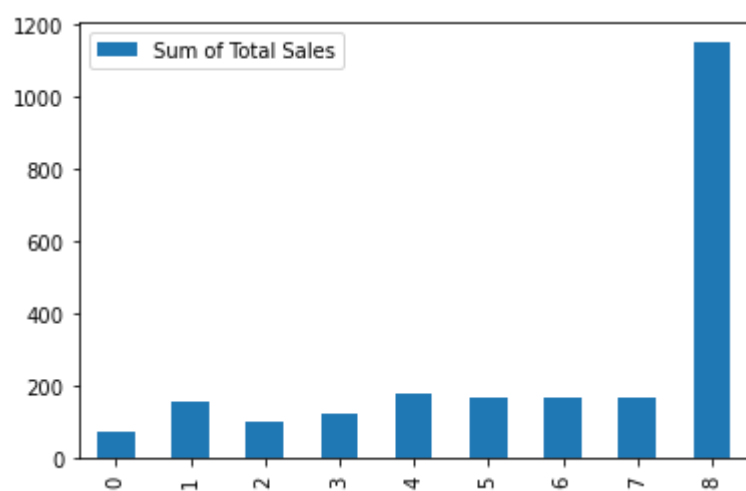


In [18]:

```
b.plot.bar()
```

Out[18]:

<AxesSubplot:>

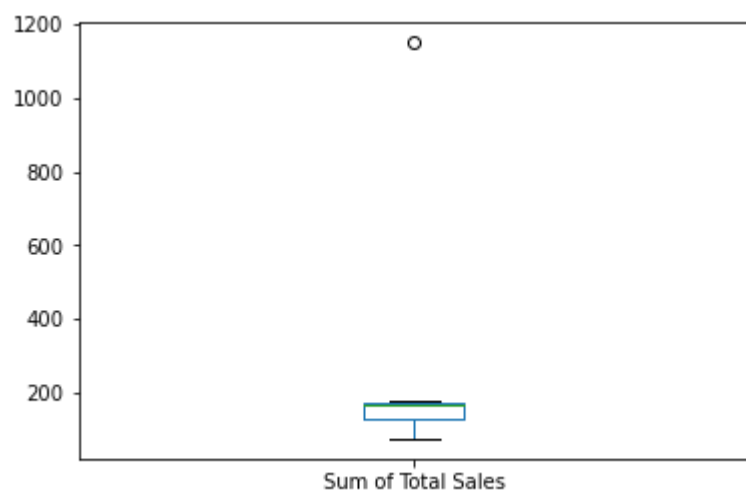


In [20]:

```
b.plot.box()
```

Out[20]:

<AxesSubplot:>

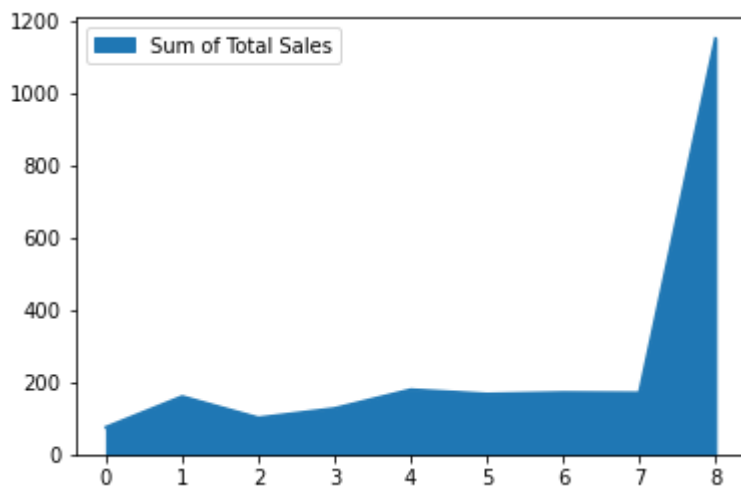


In [21]:

```
b.plot.area()
```

Out[21]:

<AxesSubplot:>

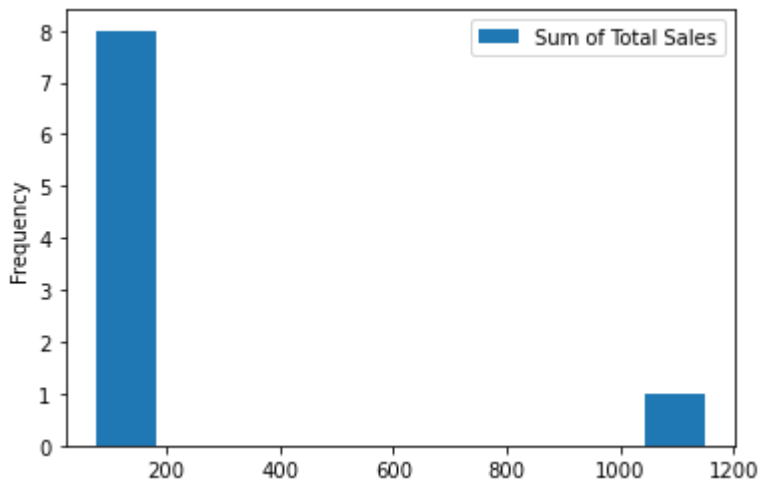


In [22]:

```
b.plot.hist()
```

Out[22]:

<AxesSubplot:ylabel='Frequency'>



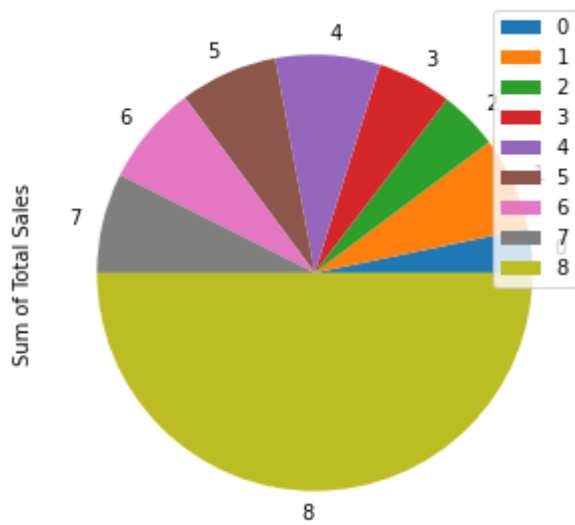


In [24]:

```
b.plot.pie(y='Sum of Total Sales',figsize=(5,5))
```

Out[24]:

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

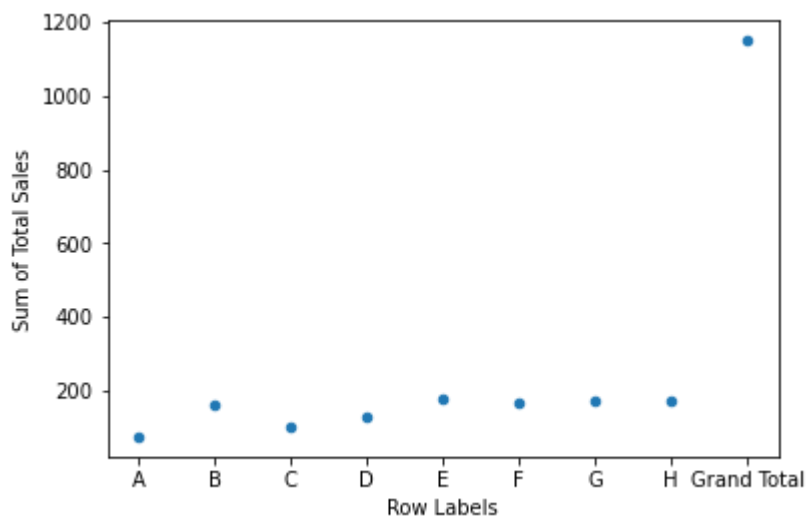


In [25]:

```
b.plot.scatter(x='Row Labels',y='Sum of Total Sales')
```

Out[25]:

<AxesSubplot:xlabel='Row Labels', ylabel='Sum of Total Sales'>



In [ ]: