22/07/2023

In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as pp
```

In [145]:
```
x=pd.read_csv(r"C:\Users\user\Downloads\3_Fitness-1 - 3_Fitness-1.csv")
x
```

Out[145]:

	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 [146]:
```
x.dtypes
```

Out[146]:
```
Row Labels            object
Sum of Jan            object
Sum of Feb            object
Sum of Mar            object
Sum of Total Sales     int64
dtype: object
```

In [147]:
```
x.head()
```

Out[147]:

	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

In [148]:
```
x.tail()
```

Out[148]:

	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 [149]:
```
x.columns
```

Out[149]:
```
Index(['Row Labels', 'Sum of Jan', 'Sum of Feb', 'Sum of Mar',
       'Sum of Total Sales'],
      dtype='object')
```

In [150]:
```
x.index
```

Out[150]:
```
RangeIndex(start=0, stop=9, step=1)
```

In [151]:
```
x.describe()
```

Out[151]:

	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 [160]:
```
x["Sum of Jan"]
```

Out[160]:
```
0      5.62%
1      4.21%
2      9.83%
3      2.81%
4     25.28%
5      8.15%
6     18.54%
7     25.56%
8    100.00%
Name: Sum of Jan, dtype: object
```

In [153]:
```
x[0:2]
```

Out[153]:

	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 [154]:
```
x.iloc[0:2]
```

Out[154]:

	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 [155]:
```
x.loc[0:3]
```

Out[155]:

	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 [161]:
```
x.loc["Sum of Feb":"Sum of Mar"]
```

Out[161]:

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

In [162]:
```
x[x["Sum of Total Sales"]<=2]
```

Out[162]:

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

In [163]:
```
x.fillna(value=5)
```

Out[163]:

	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

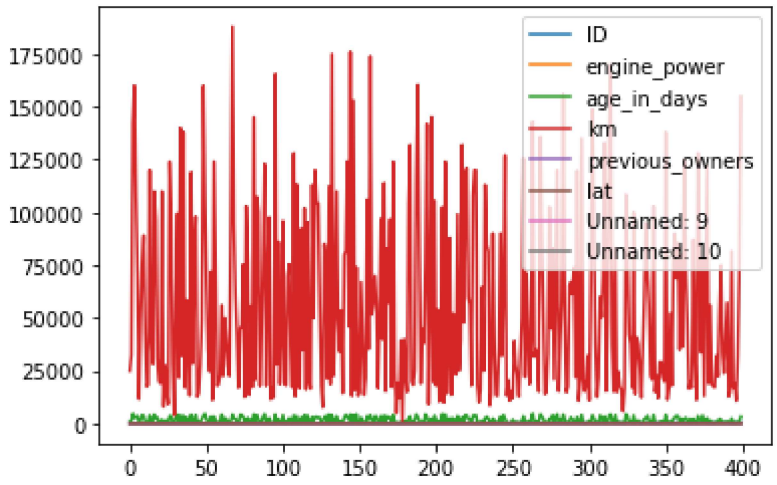
In [159]:
```
x.dropna()
```

Out[159]:

	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

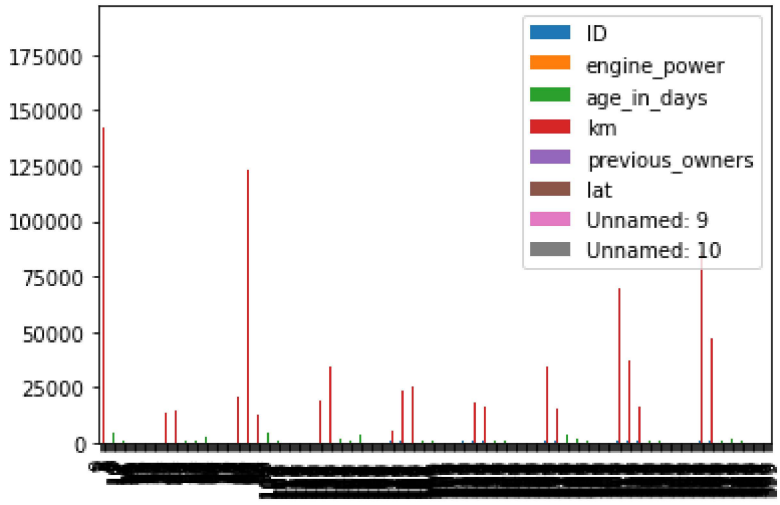
In [139]:
```
x.plot.line()
```

Out[139]: <AxesSubplot:>



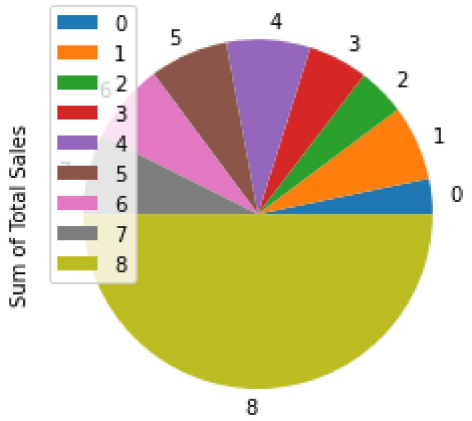
In [140]:
```
x.plot.bar()
```

Out[140]: <AxesSubplot:>



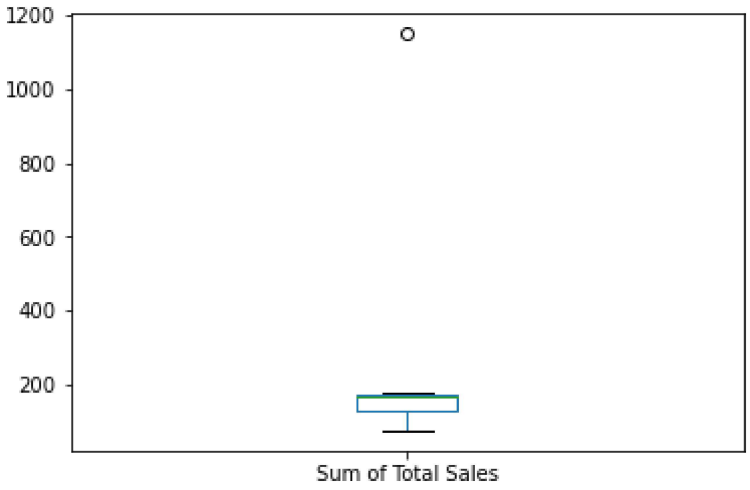
In [168]:
```
x.plot.pie(y='Sum of Total Sales')
```

Out[168]: <AxesSubplot:ylabel='Sum of Total Sales'>



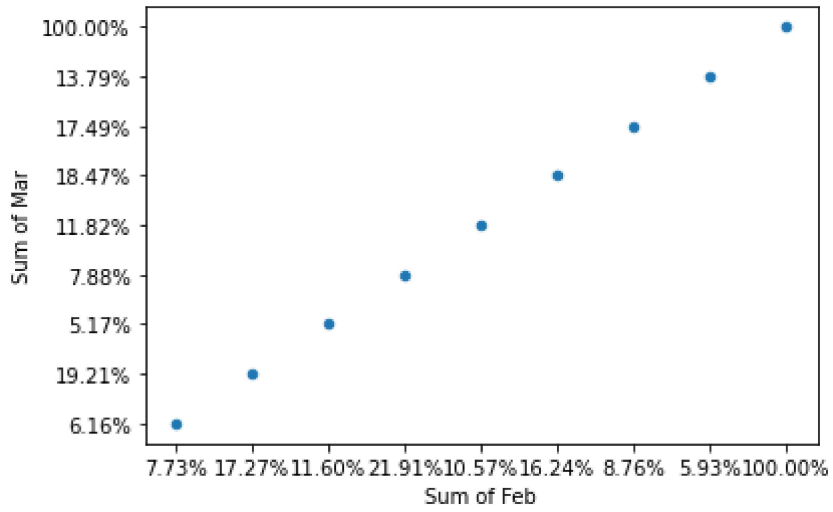
In [167]:
```
x.plot.box()
```

Out[167]: <AxesSubplot:>



In [166]:
```
x.plot.scatter(x='Sum of Feb',y='Sum of Mar')
```

Out[166]: <AxesSubplot:xlabel='Sum of Feb', ylabel='Sum of Mar'>



In [ ]:
```

```