Matlab Code Snap :

```python
     import pandas as pd
[2]  import numpy as np
     from sklearn.preprocessing import MinMaxScaler
     from matplotlib import pyplot as plt

     %matplotlib inline
```

```python
[3]  from google.colab import drive
     drive.mount('/content/drive')
```

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).

```python
[4]  df = pd.read_csv("/feeds.csv")
     print(df)
```

```
              created_at  Temperature  Humidity
0    2021-03-16 19:31:17 UTC         29.7      37.0
1    2021-03-16 19:31:38 UTC         29.7      38.0
2    2021-03-16 19:31:59 UTC         30.4      53.0
3    2021-03-16 19:33:11 UTC         29.9      40.0
4    2021-03-16 19:33:27 UTC         29.8      40.0
..                     ...          ...       ...
540  2021-03-17 19:07:19 UTC         30.6      34.0
541  2021-03-17 19:07:36 UTC         30.6      34.0
542  2021-03-18 10:16:42 UTC         29.5      44.0
543  2021-03-18 10:17:35 UTC         29.6      43.0
544  2021-03-18 10:22:23 UTC         29.6      44.0

[545 rows x 3 columns]
```

```python
plt.scatter(df.Temperature,df['Humidity'])
plt.xlabel('Temperature')
plt.ylabel('Humidity')
```

```python
scaler = MinMaxScaler()

scaler.fit(df[['Humidity']])
df['Humidity'] = scaler.transform(df[['Humidity']])

scaler.fit(df[['Temperature']])
df['Temperature'] = scaler.transform(df[['Temperature']])
```

```python
[7]  print(df)
```

```
              created_at  Temperature  Humidity
0    2021-03-16 19:31:17 UTC     0.055556  0.392857
1    2021-03-16 19:31:38 UTC     0.055556  0.428571
2    2021-03-16 19:31:59 UTC     0.250000  0.964286
3    2021-03-16 19:33:11 UTC     0.111111  0.500000
4    2021-03-16 19:33:27 UTC     0.083333  0.500000
..                     ...          ...       ...
540  2021-03-17 19:07:19 UTC     0.305556  0.285714
541  2021-03-17 19:07:36 UTC     0.305556  0.285714
542  2021-03-18 10:16:42 UTC     0.000000  0.642857
543  2021-03-18 10:17:35 UTC     0.027778  0.607143
544  2021-03-18 10:22:23 UTC     0.027778  0.642857

[545 rows x 3 columns]
```

```python
[33]  km = KMeans(n_clusters=3,init='k-means++',n_init=10, max_iter=300,tol=0.0001)
      y_predicted = km.fit_predict(df[['Temperature','Humidity']])
      y_predicted
```

```
[33] array([1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
            1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0, 0, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
            2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 1, 1, 1], dtype=int32)
```

```
[37] df['cluster']=y_predicted
     print(df)
```

```
              created_at Temperature  Humidity  cluster
0    2021-03-16 19:31:17 UTC   0.055556  0.392857       1
1    2021-03-16 19:31:38 UTC   0.055556  0.428571       1
2    2021-03-16 19:31:59 UTC   0.250000  0.964286       1
3    2021-03-16 19:33:11 UTC   0.111111  0.500000       1
4    2021-03-16 19:33:27 UTC   0.083333  0.500000       1
..       ...                        ...       ...     ...
540  2021-03-17 19:07:19 UTC   0.305556  0.285714       2
541  2021-03-17 19:07:36 UTC   0.305556  0.285714       2
542  2021-03-18 10:16:42 UTC   0.000000  0.642857       1
543  2021-03-18 10:17:35 UTC   0.027778  0.607143       1
544  2021-03-18 10:22:23 UTC   0.027778  0.642857       1

[545 rows x 4 columns]
```

```
[34] km.cluster_centers_
```

```
     array([[0.8956003 , 0.0738255 ],
            [0.11354167, 0.43928571],
            [0.42890772, 0.25015133]])
```

```
[35] df1 = df[df.cluster==0]
     df2 = df[df.cluster==1]
     df3 = df[df.cluster==2]
     plt.scatter(df1.Temperature,df1['Humidity'],color='green')
     plt.scatter(df2.Temperature,df2['Humidity'],color='red')
     plt.scatter(df3.Temperature,df3['Humidity'],color='black')
     plt.scatter(km.cluster_centers_[:,0],km.cluster_centers_[:,1],color='purple',marker='*',label='centroid')
     plt.legend()
```

Output From code:

<matplotlib.legend.Legend at 0x7f730e712390>

<matplotlib.legend.Legend at 0x7f0b2b782950>