6/30/22, 7:37 AM Test

```
In [1]: import matplotlib.pyplot as plt
        import numpy as np
        import pandas as pd
        from sklearn.model_selection import train_test_split
        from sklearn.tree import DecisionTreeClassifier
        from sklearn.metrics import accuracy score
        import mysql.connector
In [2]:
        from mysql.connector import Error
         connection = mysql.connector.connect(
               host="203.145.218.196",
              user="user",
              password="user",
              database="mydb"
        mycursor = connection.cursor()
In [3]:
        mycursor.execute("SELECT * FROM tb_sensor WHERE sensor_id= 2")
        myresult = mycursor.fetchall()
In [4]: timestamp = []
        min = []
        max = []
        avg = []
        peak = []
        peaktopeak = []
        rms = []
        label = []
In [5]: for i in myresult:
            timestamp.append(i[0])
            min.append(i[1])
            max.append(i[2])
            avg.append(i[3])
             peak.append(i[4])
            peaktopeak.append(i[5])
            rms.append(i[6])
            if i[5] > 0.004:
                  label.append("1")
```

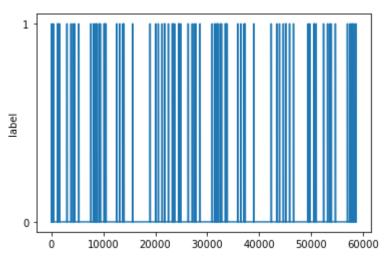
203.145.218.196:8888/lab/tree/Hassan 1/3

6/30/22, 7:37 AM Test

```
else:
                   label.append("0")
In [6]: print(i)
         (datetime.datetime(2022, 6, 26, 1, 15, 10), 5.14742, 5.15047, 5.14913, 5.15047, 0.0030508, 5.14913, 2)
         plt.plot(peaktopeak)
In [7]:
         plt.ylabel('peaktopeak_label')
         plt.show()
           0.0175
           0.0150
         0.0125
0.0100
0.0075
           0.0050
           0.0025
                         10000
                                         30000
                                                 40000
                    0
                                 20000
                                                         50000
                                                                 60000
         plt.plot(label)
In [8]:
         plt.ylabel('label')
         plt.show()
```

203.145.218.196:8888/lab/tree/Hassan 2/3

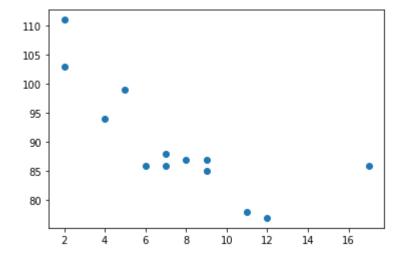
6/30/22, 7:37 AM Test



```
In [9]: import matplotlib.pyplot as plt

x = [5,7,8,7,2,17,2,9,4,11,12,9,6]
y = [99,86,87,88,111,86,103,87,94,78,77,85,86]

plt.scatter(x, y)
plt.show()
```



In [ ]:

203.145.218.196:8888/lab/tree/Hassan