```
 1 import pandas as pd
 2 import matplotlib.pyplot as plt
 3 import sklearn
 4 from sklearn.model_selection import train_test_split
 5 from sklearn import linear_model
 6 from sklearn.utils import shuffle
 7 from sklearn import preprocessing
 8 import numpy as np
 9
10 # PRE-PROCESSING OF DATA
11 file = pd.read_table('pinch and fist 8 december.txt')
12 feature_names = ['Sensor1', 'Sensor2', 'Sensor3']
13 X = file[feature_names]
14 y = file['grasp']
15
16 # remove nan error
17 import pandas as pd
18 X=X.replace([np.inf,-np.inf])
19 X = X.apply (pd.to_numeric, errors='coerce')
20 X = X.dropna()
21
22 y=y.replace([np.inf,-np.inf])
23 y = y.apply (pd.to_numeric, errors='coerce')
24 y = y.dropna()
25
26
27 # TESTING AND TRAINING
28 X_train, X_test, y_train, y_test = train_test_split(X
   , y, random_state=5)
29 from sklearn.preprocessing import MinMaxScaler
30 scaler = MinMaxScaler()
31 X_train = scaler.fit_transform(X_train)
32 print(X_train)
33 X_test = scaler.transform(X_test)
34 print(X_test)
35
36
37 # DECISION TREE
38 from sklearn.tree import DecisionTreeClassifier
39 clf = DecisionTreeClassifier().fit(X_train, y_train)
40 print('Accuracy of Decision Tree classifier on
   training set: {:.2f}'
41       .format(clf.score(X_train, y_train)))
42 print('Accuracy of Decision Tree classifier on test
```

```
42 set: {:.2f}'
43       .format(clf.score(X_test, y_test)))
44
45
46 output=scaler.transform([[49,27,21]])
47 print(output)
48 print(clf.predict(output))
49
50
51
```