

Start coding or [generate](#) with AI.

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from sklearn import tree
from sklearn.tree import DecisionTreeClassifier
df=pd.DataFrame(np.random.randn(10,3),columns=['Age','Experience','Rank'])
df.to_csv("d:\Decision_tree.csv")
a=pd.read_csv("d:\Decision_tree.csv")
print(a)
Nationality=['UK','USA','FRANCE']
a['Nationality']=np.random.choice(Nationality,10)
Go=['YES','NO']
a['Go']=np.random.choice(Go,10)
d={'UK':0,'USA':1,'FRANCE':2}
a['Nationality']=a['Nationality'].map(d)
d={'YES':1,'NO':0}
a['Go']=a['Go'].map(d)
feature=['Age','Experience','Rank','Nationality']
x=a[feature]
y=a['Go']
dtree=DecisionTreeClassifier()
dtree.fit(x,y)
tree.plot_tree(dtree,feature_names=feature)
plt.show()
```

```
Unnamed: 0    Age    Experience    Rank
0      0  0.518477    2.059680    1.240659
1      1  0.975137   -1.738508   -1.405563
2      2 -1.331759   -0.607438    1.061238
3      3  0.148257   -1.779852    2.090567
4      4 -2.438117    2.351351    0.447972
5      5 -0.162058    1.896681    0.916471
6      6 -0.217038    0.212512   -0.121783
7      7  0.180117    0.035607    0.426826
8      8  0.268414    0.986398   -1.875399
9      9 -0.195801    0.487708   -1.130744
```

