

In [15]:

```
import pandas as pd
from sklearn.tree import DecisionTreeClassifier
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score
```

In [16]:

```
music_data=pd.read_csv('music.csv')
```

In [17]:

```
X = music_data.drop(columns=['genre'])
X
```

Out[17]:

	age	gender
0	20	1
1	23	1
2	25	1
3	26	1
4	29	1
5	30	1
6	31	1
7	33	1
8	37	1
9	20	0
10	21	0
11	25	0
12	26	0
13	27	0
14	30	0

In [18]:

```
Y = music_data['genre']  
Y
```

Out[18]:

```
0      HipHop  
1      HipHop  
2      HipHop  
3        Jazz  
4        Jazz  
5        Jazz  
6    Classical  
7    Classical  
8    Classical  
9        Dance  
10       Dance  
11       Dance  
12    Acoustic  
13    Acoustic  
14    Acoustic  
Name: genre, dtype: object
```

In [19]:

```
X_train, X_test, Y_train, Y_test = train_test_split(X,Y,test_size=0.2)
```

In [20]:

```
model = DecisionTreeClassifier()  
model.fit(X_train,Y_train)  
predictions = model.predict(X_test)  
predictions
```

Out[20]:

```
array(['Acoustic', 'Classical', 'HipHop'], dtype=object)
```

In [50]:

```
score = accuracy_score(Y_test,predictions)  
print("{} %".format(score*100))
```

```
100.0 %
```