In [ ]:

```
import pandas as pd
```

In [ ]:

```
df = pd.read_csv("/content/weatherPrediction_regression.csv")
df
```

Out[ ]:

	Outlook	Temp	Humidity	Windy	Hours Played
0	Rainy	Hot	High	False	25
1	Rainy	Hot	High	True	30
2	Overcast	Hot	High	False	46
3	Sunny	Mild	High	False	45
4	Sunny	Cool	Normal	False	52
5	Sunny	Cool	Normal	True	23
6	Overcast	Cool	Normal	True	43
7	Rainy	Mild	High	False	35
8	Rainy	Cool	Normal	False	38
9	Sunny	Mild	Normal	False	46
10	Rainy	Mild	Normal	True	48
11	Overcast	Mild	High	True	52
12	Overcast	Hot	Normal	False	44
13	Sunny	Mild	High	True	30

In [ ]:

```
one_hot_data = pd.get_dummies(df[ ['Outlook', 'Temp', 'Humidity', 'Windy'] ])
#print the new dummy data
one_hot_data
```

Out[ ]:

	Windy	Outlook_Overcast	Outlook_Rainy	Outlook_Sunny	Temp_Cool	Temp_Hot	Temp_Mild	Humidity_High	Humidity_No
0	False	0	1	0	0	1	0	1	
1	True	0	1	0	0	1	0	1	
2	False	1	0	0	0	1	0	1	
3	False	0	0	1	0	0	1	1	
4	False	0	0	1	1	0	0	0	
5	True	0	0	1	1	0	0	0	
6	True	1	0	0	1	0	0	0	
7	False	0	1	0	0	0	1	1	
8	False	0	1	0	1	0	0	0	
9	False	0	0	1	0	0	1	0	
10	True	0	1	0	0	0	1	0	
11	True	1	0	0	0	0	1	1	
12	False	1	0	0	0	1	0	0	
13	True	0	0	1	0	0	1	1	

In [ ]:

```
x_data = one_hot_data.values
y_data = df["Hours Played"].values
```

In [ ]:

```
y_data
```

Out[ ]:

```
array([25, 30, 46, 45, 52, 23, 43, 35, 38, 46, 48, 52, 44, 30])
```

In [ ]:

```
from sklearn.tree import DecisionTreeRegressor
classifier = DecisionTreeRegressor()
classifier = classifier.fit(x_data,y_data)
```

In [ ]:

```
from sklearn import tree
import graphviz
dot_data = tree.export_graphviz(classifier, out_file=None,filled=True,
                                feature_names=one_hot_data.columns.values
                                )
graph = graphviz.Source(dot_data)
graph
```

Out[ ]:

In [ ]:

```

```