In [1]:
```
import numpy as np
import pandas as pd

dataset=pd.read_csv("data.csv")
X=dataset.iloc[:,:-1]
y=dataset.iloc[:,5].values

from sklearn.preprocessing import LabelEncoder
labelencoder_X=LabelEncoder()

X=X.apply(LabelEncoder().fit_transform)
print(X)

from sklearn.tree import DecisionTreeClassifier
regressor=DecisionTreeClassifier()
regressor.fit(X.iloc[:,1:5],y)

X_in=np.array([1,1,0,0])
y_pred=regressor.predict([X_in])

print("Prediction",y_pred)
from sklearn.externals.six import StringIO
from IPython.display import Image
from sklearn.tree import export_graphviz
import pydotplus

dot_data=StringIO()
export_graphviz(regressor,out_file=dot_data,filled=True,rounded=True,spe
cial_characters=True)
graph=pydotplus.graph_from_dot_data(dot_data.getvalue())
graph.write_png('decisiontree.png')
```

```
      id  age  income  gender  marrital_status
0      0    1       0       1                1
1      1    1       0       1                0
2      2    0       0       1                1
3      3    2       2       1                1
4      4    2       1       0                1
5      5    2       1       0                0
6      6    0       1       0                0
7      7    1       2       1                1
8      8    1       1       0                0
9      9    2       2       0                1
10    10    1       2       0                0
11    11    0       2       1                0
12    12    0       0       0                1
13    13    2       2       1                0
('Prediction', array(['Yes'], dtype=object))
```

Out[1]: True

In [ ]: