## Decision Tree Classifier on Heart Kaggle dataset

import pandas as pd

import numpy as np

from sklearn import tree

import graphviz

heart=pd.read\_csv("/content/heart.csv")

x=heart.iloc[:,:13]

y=heart.iloc[:,-1]

#Algorithm

from sklearn.tree import DecisionTreeClassifier

ML=DecisionTreeClassifier(criterion="entropy",random\_state=42)

fn=x.columns

#Fit data into model

ML=ML.fit(x,y)

#Prediction

op=ML.predict([[6,154,359,0,2,162,0,0,4,2,0,2,3]])

print("Predicted value using Decision Tree Classifier:",op)

##Plotting the decision tree

import graphviz

dot\_data= tree.export\_graphviz(ML,feature\_names=fn, class\_names=True,filled=True,rounded=True,special\_characters=True)

graph=graphviz.Source(dot\_data)

graph.render("HeartDT.pdf")

graph

Output

