

**Program:**

```
Import pandas as pd
```

```
From sklearn.tree import DecisionTreeClassifier, plot_tree
```

```
Import matplotlib.pyplot as plt
```

```
Data = pd.read_csv("stud.csv")
```

```
Df = pd.DataFrame(data)
```

```
X = df[['study hours', 'attendance']]
```

```
Y = df['result']
```

```
Clf = DecisionTreeClassifier(criterion='entropy', random_state=0)
```

```
Clf.fit(x, y)
```

```
Plt.figure(figsize=(8,18))
```

```
Plot_tree(clf, feature_names=['study hours', 'attendance'],  
class_names=['1', '0'], filled=True)
```

```
Plt.show()
```

```
New = [[5, 85]]
```

```
Pred = clf.predict(new
```

```
Print("Prediction for new student:", "1" if pred[0] == 1 else "0")
```

## Output:

