import data

In [ ]:
```
import numpy as np
import pandas as pd
import seaborn as sns
df=sns.load_dataset("iris")
df.head()
```

Out[ ]:

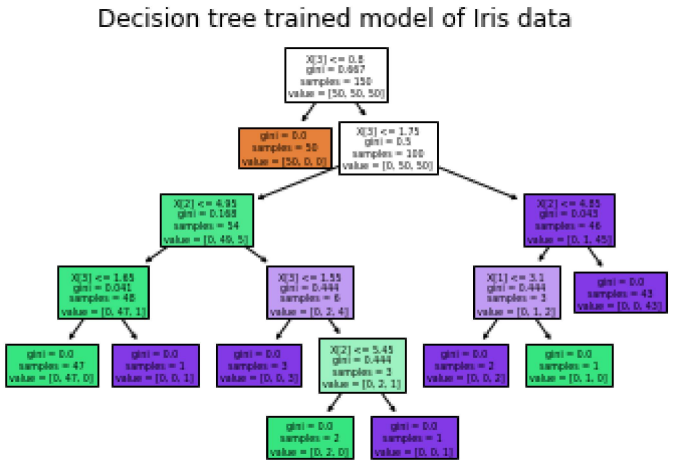
	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [ ]:
```
import matplotlib.pyplot as plt
from sklearn.tree import DecisionTreeClassifier
X= df.iloc[ : ,:-1]
y= df.iloc[ : ,-1:]
```

Output

In [ ]:
```
from sklearn.tree import DecisionTreeClassifier
from sklearn.tree import plot_tree

model = DecisionTreeClassifier().fit(X, y)
plot_tree(model, filled=True)
plt.title("Decision tree trained model of Iris data")
plt.savefig("file_Decision_tree_classification.png")
plt.show()
```



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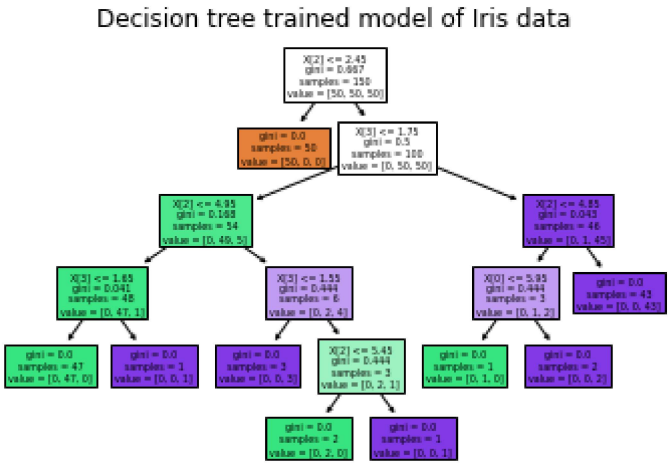
from sklearn.tree import DecisionTreeClassifier
```

```
from sklearn.tree import plot_tree

model = DecisionTreeClassifier().fit(X, y)
plot_tree(model, filled=True)
plt.title("Decision tree trained model of Iris data")
plt.savefig("file_Decision_tree_classification.pdf")
plt.show()
```



In [ ]:

```
from sklearn.tree import DecisionTreeClassifier
from sklearn.tree import plot_tree

model = DecisionTreeClassifier().fit(X, y)
plot_tree(model, filled=True)
plt.title("Decision tree trained model of Iris data")
plt.savefig("file_Decision_tree_classification.png", DPI= '300')
plt.show()
```

```
C:\Users\Javeria\AppData\Local\Temp\ipykernel_12788\3159741855.py:7: MatplotlibDeprecati
onWarning: savefig() got unexpected keyword argument "DPI" which is no longer supported
as of 3.3 and will become an error in 3.6
  plt.savefig("file_Decision_tree_classification.png", DPI= '300')
```