

# OUTPUT FOR IRIS DATA SET

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IPython console
Console 3/A

In [32]: runfile('C:/Users/Dell/.spyder-py3/drivee.py', wdir='C:/Users/Dell/.spyder-py3')
Reloaded modules: DecisionTree
Is PetalW >= 1.0?
--> True:
  Is PetalW >= 1.8?
  --> True:
    Is PetalL >= 4.9?
    --> True:
      Predict {'Iris-virginica': 43}
    --> False:
      Is SepalW >= 3.2?
      --> True:
        Predict {'Iris-versicolor': 1}
      --> False:
        Predict {'Iris-virginica': 2}
  --> False:
    Is PetalL >= 5.0?
    --> True:
      Is PetalW >= 1.6?
      --> True:
        Is PetalL >= 5.8?
        --> True:
          Predict {'Iris-virginica': 1}
        --> False:
          Predict {'Iris-versicolor': 2}
      --> False:
        Predict {'Iris-virginica': 3}
    --> False:
      Is PetalW >= 1.7?
      --> True:
        Predict {'Iris-virginica': 1}
      --> False:
        Predict {'Iris-versicolor': 47}
--> False:
  Predict {'Iris-setosa': 50}
***** Leaf nodes *****
id = 1 depth =1
id = 23 depth =4

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IPython console
Console 3/A

Predict {'Iris-setosa': 50}
***** Leaf nodes *****
id = 1 depth =1
id = 23 depth =4
id = 24 depth =4
id = 25 depth =4
id = 53 depth =5
id = 54 depth =5
id = 27 depth =4
id = 28 depth =4
id = 14 depth =3
***** Non-leaf nodes *****
id = 11 depth =3
id = 26 depth =4
id = 12 depth =3
id = 5 depth =2
id = 13 depth =3
id = 6 depth =2
id = 2 depth =1
id = 0 depth =0
*****Tree before pruning*****
Is PetalW >= 1.0?
--> True:
  Is PetalL >= 4.8?
  --> True:
    Is PetalL >= 5.2?
    --> True:
      Predict {'Iris-virginica': 30}
    --> False:
      Is SepalW >= 3.2?
      --> True:
        Predict {'Iris-versicolor': 1}
      --> False:
        Is PetalW >= 1.8?
        --> True:
          Predict {'Iris-virginica': 12}
        --> False:
          Is PetalW >= 1.6?
          --> True:

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Predict {'Iris-versicolor': 2}
--> False:
  Predict {'Iris-virginica': 2}
--> False:
  Is PetalW >= 1.7?
  --> True:
    Predict {'Iris-virginica': 1}
  --> False:
    Predict {'Iris-versicolor': 34}
--> False:
  Predict {'Iris-setosa': 38}
accuracy on test = 87.0
accuracy on training = 100.0
*****Tree after pruning*****
Is PetalW >= 1.0?
--> True:
  Is PetalL >= 4.8?
  --> True:
    Is PetalL >= 5.2?
    --> True:
      Predict {'Iris-virginica': 30}
    --> False:
      Predict {'Iris-virginica': 14, 'Iris-versicolor': 3}
  --> False:
    Is PetalW >= 1.7?
    --> True:
      Predict {'Iris-virginica': 1}
    --> False:
      Predict {'Iris-versicolor': 34}
--> False:
  Predict {'Iris-setosa': 38}
accuracy on test = 90.0
accuracy on training = 97.0

In [33]: |
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