Assignment No:1

Div-B

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import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns

df = pd.read\_csv("iris.data")

print df.head()

print df.info()

print df.shape

print df.describe()

#print df["sepal\_length"]

#print df[["sepal\_length","petal\_length"]]

print df.columns.values

for col in df.columns.values[:4]:

print col

df.hist(column=col)

plt.show()

df.plot(kind="scatter",x="sepal\_length",y="sepal\_width")

plt.show()

sns.set\_style("whitegrid")

sns.FacetGrid(df,hue="class",size=4).map(plt.scatter,"sepal\_length","sepal\_width").add\_legend()

plt.show()

df.boxplot(column=list(df.columns.values[:-1]))

plt.show()

for col in df.columns.values[:-1]:

print col

df.boxplot(column=col)

plt.show()

Output

sepal\_length sepal\_width petal\_length petal\_width class

0 5.1 3.5 1.4 0.2 Iris-setosa

1 4.9 3.0 1.4 0.2 Iris-setosa

2 4.7 3.2 1.3 0.2 Iris-setosa

3 4.6 3.1 1.5 0.2 Iris-setosa

4 5.0 3.6 1.4 0.2 Iris-setosa

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 150 entries, 0 to 149

Data columns (total 5 columns):

sepal\_length 150 non-null float64

sepal\_width 150 non-null float64

petal\_length 150 non-null float64

petal\_width 150 non-null float64

class 150 non-null object

dtypes: float64(4), object(1)

memory usage: 5.9+ KB

None

(150, 5)

sepal\_length sepal\_width petal\_length petal\_width

count 150.000000 150.000000 150.000000 150.000000

mean 5.843333 3.054000 3.758667 1.198667

std 0.828066 0.433594 1.764420 0.763161

min 4.300000 2.000000 1.000000 0.100000

25% 5.100000 2.800000 1.600000 0.300000

50% 5.800000 3.000000 4.350000 1.300000

75% 6.400000 3.300000 5.100000 1.800000

max 7.900000 4.400000 6.900000 2.500000

['sepal\_length' 'sepal\_width' 'petal\_length' 'petal\_width' 'class']

sepal\_length

sepal\_width

petal\_length

petal\_width

D:\Python27\lib\site-packages\seaborn\axisgrid.py:230: UserWarning: The `size` paramter has been renamed to `height`; please update your code.

warnings.warn(msg, UserWarning)

sepal\_length

sepal\_width

petal\_lengthpetal\_width