

Practical no 10

Tutorial

In this practical we will be using seaborn library to plot boxplots and histogram and analyze them as per the given conditions in the manual.

We will be using the iris flower dataset which is already included in the seaborn library.

If you find any doubt here is a youtube link to the tutorial video : (<https://www.youtube.com/watch?v=CF6AKMXHkpQ>)

However note that this code is a little bit modified for spyder , as we cannot access google collab in the practical lab. So most probably stick with this code only.

Step 1 : open anaconda and launch spyder

Step2 : import seaborn library and iris dataset :

```
import seaborn as sns  
dataset = sns.load_dataset('iris')  
dataset.head()
```

Step 3 : plot the histogram:

```
import matplotlib.pyplot as plt  
#fig, axes = plt.subplots(2,2, figsize = (16,9))  
sns.histplot(dataset['sepal_length'])  
sns.histplot(dataset['sepal_width'])  
sns.histplot(dataset['petal_length'])  
sns.histplot(dataset['petal_width'])
```

Step 4: plot the box plots:

```
import matplotlib.pyplot as plt
#fig, axes = plt.subplots(2,2, figsize = (16,9))
sns.boxplot(y='petal_length',x='species', data = dataset)
sns.boxplot(y='petal_width',x='species', data = dataset)
sns.boxplot(y='sepal_length',x='species', data = dataset)
sns.boxplot(y='sepal_width',x='species', data = dataset)
```

Step 5: execute the following code to get the 8 plots.

Step 6: now analyze the plots according to the instructions given in the manual.

Step 7: save the file.