

<https://github.com/Anjaliwakade/practical>

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

df=pd.read_csv("Iris.csv")
df.tail()

df.isnull().sum()

df.dtypes

df.info()

df.describe()

sns.catplot(x ="Species", hue ="SepalLengthCm",
kind ="count", data = df)

sns.histplot(data=df, x="Species")

sns.histplot(data=df, x="SepalLengthCm")
#Average sepallength lies between 5 -6
df['SepalLengthCm'].mean()

sns.histplot(data=df, x="PetalLengthCm")
#Average sepalwidth lies between 4 -6
df['PetalLengthCm'].mean()

sns.histplot(data=df, x="SepalWidthCm")
#Average sepalwidth lies between 2.5 -3.5
df['SepalWidthCm'].mean()

sns.histplot(data=df, x="PetalWidthCm")
#Average petalwidth lies between 1 -2
df['PetalWidthCm'].mean()
.
```

```
sns.boxplot(x=df['SepalLengthCm'])  
#Median lies between 5.5 to 6
```

```
sns.boxplot(x=df['PetalLengthCm'])
```

```
sns.boxplot(x=df['SepalWidthCm'])
```

```
sns.boxplot(x=df['PetalWidthCm'])  
#Median lies between 1 to 1.5
```

Out[17]:

```
<AxesSubplot:xlabel='PetalWidthCm'>
```

```
Q1=df['SepalWidthCm'].quantile(0.25)  
Q3=df['SepalWidthCm'].quantile(0.75)  
Q1,Q3
```

```
sns.histplot(data=df, x="SepalWidthCm")  
#Average sepalwidth lies between 2.5 -3.5  
df['SepalWidthCm'].mean()
```

```
sns.histplot(data=df, x="PetalWidthCm")  
#Average petalwidth lies between 1 -2  
df['PetalWidthCm'].mean()
```

```
df[(df['SepalWidthCm']<lower_limit) | (df['SepalWidthCm']>upper_limit)]
```

```
df_without_outliers=df[(df['SepalWidthCm']>lower_limit) & (df['SepalWidthCm']  
<upper_limit)]  
df_without_outliers
```

```
sns.boxplot(x=df_without_outliers['SepalWidthCm'])
```

```
df.corr()
```