

In [5]:

```

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.simplefilter("ignore")
df=pd.read_csv('Z:/College\3.2/ML LAB/Final lab/datasets/iris.csv')
df
df.info()
df.isnull().sum()
df.columns
df=df.drop(columns="Id")
df

df['Species'].value_counts()
sns.countplot(df['Species']);
x=df.iloc[:,4]
y=df.iloc[:,4]
x
y
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=1/3,random_state=0)
x_train.shape
x_test.shape
y_train.shape
y_test.shape
from sklearn.linear_model import LogisticRegression
model=LogisticRegression()
model.fit(x_train,y_train)
LogisticRegression()
y_pred=model.predict(x_test)
y_pred
from sklearn.metrics import accuracy_score,confusion_matrix
confusion_matrix(y_test,y_pred)
accuracy=accuracy_score(y_test,y_pred)*100
print("Accuracy of the model is {:.2f}".format(accuracy))

```

```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 6 columns):
Id                150 non-null int64
SepalLengthCm     150 non-null float64
SepalWidthCm      150 non-null float64
PetalLengthCm     150 non-null float64
PetalWidthCm      150 non-null float64
Species           150 non-null object
dtypes: float64(4), int64(1), object(1)
memory usage: 7.1+ KB
Accuracy of the model is 90.00

```

