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#**PROJECT TITLE:** Using the support vector mechanism algoritham of supervise machine learning,predict Iris.csv dataset to find out the species will be same or different

PROBLEM STATEMENT: A american based botnical gardens a through Iris flowers in there labens but using bio-technology in a single tree different type of variety flower is grow as data science Engineer find out how much accuracy is there all categeries contains same spaceses.

#TASK1: Pre-procses the data in skit.learn librarie

#TASK2: Load the data using sk_learn model selection default orgument

#TAS3K: On the beses of your data tarin and test and split your SPM model

#TASK4: Impliment support vector machanism using classsified.The SPM most be "Leaner"

#TASK5: Train the classifier on the training data

#TASK6: Find out the prediction value on the test data

#TASK7: Test the model with the help of accuracy,acuuracy should be lie in the range of 0-1

```
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
from sklearn.svm import SVC
from sklearn.metrics import accuracy_score

# Load the Iris dataset
iris = load_iris()
X = iris.data
y = iris.target

# Consider only two classes for simplicity
X = X[y != 2]
y = y[y != 2]

# Split the dataset into training and testing sets
X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=42)

# Create an SVM classifier
svm_classifier = SVC(kernel='linear')


# Train the classifier on the training data
svm_classifier.fit(X_train, y_train)
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SVC(kernel='linear')
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# Make predictions on the test data
y_pred = svm_classifier.predict(X_test)

# Calculate accuracy
accuracy = accuracy_score(y_test, y_pred)
print(f"Accuracy: {accuracy:.2f}")
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Accuracy: 1.00
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Conclusion:According to my support vector model the spacies are "Leaner" with accuracy of 1.00.hence proved model was succsesfully implimented

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