

```
In [36]:
```

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

```
In [37]:
```

```
ds=pd.read_csv(r'C:\Users\Akanksha\OneDrive\Desktop\ds\iris.csv')
```

```
In [38]:
```

```
columns=['Id','SepalLengthCm','SepalWidthCm','PetalLengthCm','PetalWidthCm','Species']
```

```
In [39]:
```

```
ds.head()
```

```
Out[39]:
```

	<b>Id</b>	<b>SepalLengthCm</b>	<b>SepalWidthCm</b>	<b>PetalLengthCm</b>	<b>PetalWidthCm</b>	<b>Species</b>
<b>0</b>	1	5.1	3.5	1.4	0.2	Iris-setosa
<b>1</b>	2	4.9	3.0	1.4	0.2	Iris-setosa
<b>2</b>	3	4.7	3.2	1.3	0.2	Iris-setosa
<b>3</b>	4	4.6	3.1	1.5	0.2	Iris-setosa
<b>4</b>	5	5.0	3.6	1.4	0.2	Iris-setosa

```
In [40]:
```

```
ds.describe()
```

```
Out[40]:
```

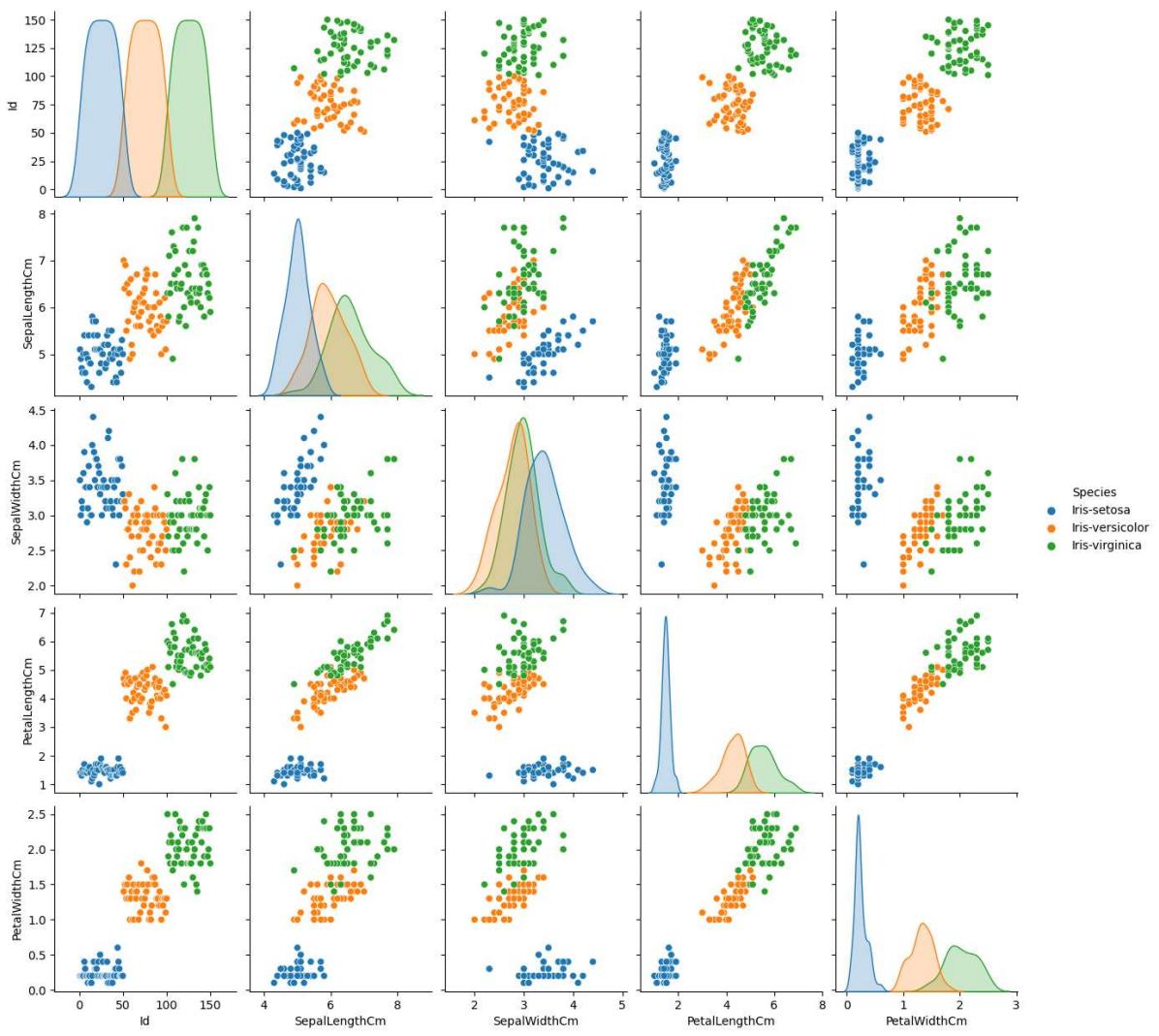
	<b>Id</b>	<b>SepalLengthCm</b>	<b>SepalWidthCm</b>	<b>PetalLengthCm</b>	<b>PetalWidthCm</b>
<b>count</b>	150.000000	150.000000	150.000000	150.000000	150.000000
<b>mean</b>	75.500000	5.843333	3.054000	3.758667	1.198667
<b>std</b>	43.445368	0.828066	0.433594	1.764420	0.763161
<b>min</b>	1.000000	4.300000	2.000000	1.000000	0.100000
<b>25%</b>	38.250000	5.100000	2.800000	1.600000	0.300000
<b>50%</b>	75.500000	5.800000	3.000000	4.350000	1.300000
<b>75%</b>	112.750000	6.400000	3.300000	5.100000	1.800000
<b>max</b>	150.000000	7.900000	4.400000	6.900000	2.500000

```
In [41]:
```

```
sns.pairplot(ds, hue='Species')
```

```
Out[41]:
```

```
<seaborn.axisgrid.PairGrid at 0x1da3504ab90>
```



```
In [42]: data=ds.values
X=data[:,0:5]
Y=data[:,5]
print(X)
```

```
[[1 5.1 3.5 1.4 0.2]
[2 4.9 3.0 1.4 0.2]
[3 4.7 3.2 1.3 0.2]
[4 4.6 3.1 1.5 0.2]
[5 5.0 3.6 1.4 0.2]
[6 5.4 3.9 1.7 0.4]
[7 4.6 3.4 1.4 0.3]
[8 5.0 3.4 1.5 0.2]
[9 4.4 2.9 1.4 0.2]
[10 4.9 3.1 1.5 0.1]
[11 5.4 3.7 1.5 0.2]
[12 4.8 3.4 1.6 0.2]
[13 4.8 3.0 1.4 0.1]
[14 4.3 3.0 1.1 0.1]
[15 5.8 4.0 1.2 0.2]
[16 5.7 4.4 1.5 0.4]
[17 5.4 3.9 1.3 0.4]
[18 5.1 3.5 1.4 0.3]
[19 5.7 3.8 1.7 0.3]
[20 5.1 3.8 1.5 0.3]
[21 5.4 3.4 1.7 0.2]
[22 5.1 3.7 1.5 0.4]
[23 4.6 3.6 1.0 0.2]
[24 5.1 3.3 1.7 0.5]
[25 4.8 3.4 1.9 0.2]
[26 5.0 3.0 1.6 0.2]
[27 5.0 3.4 1.6 0.4]
[28 5.2 3.5 1.5 0.2]
[29 5.2 3.4 1.4 0.2]
[30 4.7 3.2 1.6 0.2]
[31 4.8 3.1 1.6 0.2]
[32 5.4 3.4 1.5 0.4]
[33 5.2 4.1 1.5 0.1]
[34 5.5 4.2 1.4 0.2]
[35 4.9 3.1 1.5 0.1]
[36 5.0 3.2 1.2 0.2]
[37 5.5 3.5 1.3 0.2]
[38 4.9 3.1 1.5 0.1]
[39 4.4 3.0 1.3 0.2]
[40 5.1 3.4 1.5 0.2]
[41 5.0 3.5 1.3 0.3]
[42 4.5 2.3 1.3 0.3]
[43 4.4 3.2 1.3 0.2]
[44 5.0 3.5 1.6 0.6]
[45 5.1 3.8 1.9 0.4]
[46 4.8 3.0 1.4 0.3]
[47 5.1 3.8 1.6 0.2]
[48 4.6 3.2 1.4 0.2]
[49 5.3 3.7 1.5 0.2]
[50 5.0 3.3 1.4 0.2]
[51 7.0 3.2 4.7 1.4]
[52 6.4 3.2 4.5 1.5]
[53 6.9 3.1 4.9 1.5]
[54 5.5 2.3 4.0 1.3]
[55 6.5 2.8 4.6 1.5]
[56 5.7 2.8 4.5 1.3]
[57 6.3 3.3 4.7 1.6]
[58 4.9 2.4 3.3 1.0]
[59 6.6 2.9 4.6 1.3]
[60 5.2 2.7 3.9 1.4]
[61 5.0 2.0 3.5 1.0]
[62 5.9 3.0 4.2 1.5]
[63 6.0 2.2 4.0 1.0]
[64 6.1 2.9 4.7 1.4]
```

[65 5.6 2.9 3.6 1.3]  
[66 6.7 3.1 4.4 1.4]  
[67 5.6 3.0 4.5 1.5]  
[68 5.8 2.7 4.1 1.0]  
[69 6.2 2.2 4.5 1.5]  
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[71 5.9 3.2 4.8 1.8]  
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[76 6.6 3.0 4.4 1.4]  
[77 6.8 2.8 4.8 1.4]  
[78 6.7 3.0 5.0 1.7]  
[79 6.0 2.9 4.5 1.5]  
[80 5.7 2.6 3.5 1.0]  
[81 5.5 2.4 3.8 1.1]  
[82 5.5 2.4 3.7 1.0]  
[83 5.8 2.7 3.9 1.2]  
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[85 5.4 3.0 4.5 1.5]  
[86 6.0 3.4 4.5 1.6]  
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[89 5.6 3.0 4.1 1.3]  
[90 5.5 2.5 4.0 1.3]  
[91 5.5 2.6 4.4 1.2]  
[92 6.1 3.0 4.6 1.4]  
[93 5.8 2.6 4.0 1.2]  
[94 5.0 2.3 3.3 1.0]  
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[96 5.7 3.0 4.2 1.2]  
[97 5.7 2.9 4.2 1.3]  
[98 6.2 2.9 4.3 1.3]  
[99 5.1 2.5 3.0 1.1]  
[100 5.7 2.8 4.1 1.3]  
[101 6.3 3.3 6.0 2.5]  
[102 5.8 2.7 5.1 1.9]  
[103 7.1 3.0 5.9 2.1]  
[104 6.3 2.9 5.6 1.8]  
[105 6.5 3.0 5.8 2.2]  
[106 7.6 3.0 6.6 2.1]  
[107 4.9 2.5 4.5 1.7]  
[108 7.3 2.9 6.3 1.8]  
[109 6.7 2.5 5.8 1.8]  
[110 7.2 3.6 6.1 2.5]  
[111 6.5 3.2 5.1 2.0]  
[112 6.4 2.7 5.3 1.9]  
[113 6.8 3.0 5.5 2.1]  
[114 5.7 2.5 5.0 2.0]  
[115 5.8 2.8 5.1 2.4]  
[116 6.4 3.2 5.3 2.3]  
[117 6.5 3.0 5.5 1.8]  
[118 7.7 3.8 6.7 2.2]  
[119 7.7 2.6 6.9 2.3]  
[120 6.0 2.2 5.0 1.5]  
[121 6.9 3.2 5.7 2.3]  
[122 5.6 2.8 4.9 2.0]  
[123 7.7 2.8 6.7 2.0]  
[124 6.3 2.7 4.9 1.8]  
[125 6.7 3.3 5.7 2.1]  
[126 7.2 3.2 6.0 1.8]  
[127 6.2 2.8 4.8 1.8]  
[128 6.1 3.0 4.9 1.8]

```
[129 6.4 2.8 5.6 2.1]
[130 7.2 3.0 5.8 1.6]
[131 7.4 2.8 6.1 1.9]
[132 7.9 3.8 6.4 2.0]
[133 6.4 2.8 5.6 2.2]
[134 6.3 2.8 5.1 1.5]
[135 6.1 2.6 5.6 1.4]
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[137 6.3 3.4 5.6 2.4]
[138 6.4 3.1 5.5 1.8]
[139 6.0 3.0 4.8 1.8]
[140 6.9 3.1 5.4 2.1]
[141 6.7 3.1 5.6 2.4]
[142 6.9 3.1 5.1 2.3]
[143 5.8 2.7 5.1 1.9]
[144 6.8 3.2 5.9 2.3]
[145 6.7 3.3 5.7 2.5]
[146 6.7 3.0 5.2 2.3]
[147 6.3 2.5 5.0 1.9]
[148 6.5 3.0 5.2 2.0]
[149 6.2 3.4 5.4 2.3]
[150 5.9 3.0 5.1 1.8]]
```

```
In [43]: print(Y)
```

```
In [44]: from sklearn.model_selection import train_test_split  
X_train,X_test,y_train,y_test=train_test_split(X,Y,test_size=0.2)
```

```
In [45]: from sklearn.svm import SVC  
model_svc =SVC()  
model_svc.fit(X_train,y_train)
```

```
Out[45]: ▾ SVC  
SVC()
```

```
In [46]: prediction1=model_svc.predict(X_test)
```

```
In [47]: from sklearn.metrics import accuracy_score  
print(accuracy_score(y_test,prediction1)*100)
```

100.0

```
In [48]: from sklearn.linear_model import LogisticRegression  
LR=LogisticRegression()  
LR.fit(X_train,y_train)
```

C:\Users\Akanksha\anaconda3\Lib\site-packages\sklearn\linear\_model\\_logistic.py:460: ConvergenceWarning: lbfgs failed to converge (status=1):  
STOP: TOTAL NO. OF ITERATIONS REACHED LIMIT.

Increase the number of iterations (max\_iter) or scale the data as shown in:  
<https://scikit-learn.org/stable/modules/preprocessing.html>  
Please also refer to the documentation for alternative solver options:  
[https://scikit-learn.org/stable/modules/linear\\_model.html#logistic-regression](https://scikit-learn.org/stable/modules/linear_model.html#logistic-regression)  
n\_iter\_i = \_check\_optimize\_result()

```
Out[48]: ▾ LogisticRegression  
LogisticRegression()
```

```
In [49]: prediction2=LR.predict(X_test)  
from sklearn.metrics import accuracy_score  
print(accuracy_score(y_test,prediction1))
```

1.0

```
In [50]: from sklearn .metrics import classification_report  
print(classification_report(y_test,prediction2)*100)
```

	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
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accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
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precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
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accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
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Iris-setosa	1.00	1.00	1.00	11
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accuracy			1.00	30
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	precision	recall	f1-score	support
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weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
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Iris-versicolor	1.00	1.00	1.00	7
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accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
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Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
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Iris-setosa	1.00	1.00	1.00	11
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accuracy			1.00	30
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accuracy			1.00	30
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Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
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Iris-setosa	1.00	1.00	1.00	11
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	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12

	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12

	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
	accuracy		1.00	30
	macro avg	1.00	1.00	30
	weighted avg	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30

	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30
weighted avg		1.00	1.00	1.00	30
precision			recall	f1-score	support
Iris-setosa		1.00	1.00	1.00	11
Iris-versicolor		1.00	1.00	1.00	7
Iris-virginica		1.00	1.00	1.00	12
accuracy				1.00	30
macro avg		1.00	1.00	1.00	30

	weighted avg	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	1.00	12
accuracy				1.00	30
macro avg	1.00	1.00	1.00	1.00	30
weighted avg	1.00	precision	recall	f1-score	support

	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
precision	recall	f1-score	support	

Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support

Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11

Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7
Iris-virginica	1.00	1.00	1.00	12
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30
	precision	recall	f1-score	support
Iris-setosa	1.00	1.00	1.00	11
Iris-versicolor	1.00	1.00	1.00	7

	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12
	accuracy			1.00	30
	macro avg	1.00	1.00	1.00	30
	weighted avg	1.00	1.00	1.00	30
	precision		recall	f1-score	support
Iris-setosa					
	Iris-versicolor	1.00	1.00	1.00	7
	Iris-virginica	1.00	1.00	1.00	12

accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30

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