```
import numpy as np
import pandas as pd
df=pd.read_csv("D:/luminar/Iris.csv")
df
```

```
      Id  SepalLengthCm  SepalWidthCm  PetalLengthCm  PetalWidthCm
0      1            5.1           3.5            1.4           0.2  \
1      2            4.9           3.0            1.4           0.2
2      3            4.7           3.2            1.3           0.2
3      4            4.6           3.1            1.5           0.2
4      5            5.0           3.6            1.4           0.2
..   ...            ...           ...            ...           ...
145  146            6.7           3.0            5.2           2.3
146  147            6.3           2.5            5.0           1.9
147  148            6.5           3.0            5.2           2.0
148  149            6.2           3.4            5.4           2.3
149  150            5.9           3.0            5.1           1.8

            Species
0       Iris-setosa
1       Iris-setosa
2       Iris-setosa
3       Iris-setosa
4       Iris-setosa
..              ...
145  Iris-virginica
146  Iris-virginica
147  Iris-virginica
148  Iris-virginica
149  Iris-virginica

[150 rows x 6 columns]
```

```
df.isna().sum()
```

```
Id               0
SepalLengthCm    0
SepalWidthCm     0
PetalLengthCm    0
PetalWidthCm     0
Species          0
dtype: int64
```

```
df.drop(['Id'],axis=1,inplace=True)
df
```

```
     SepalLengthCm  SepalWidthCm  PetalLengthCm  PetalWidthCm
Species
0              5.1           3.5            1.4           0.2
Iris-setosa
1              4.9           3.0            1.4           0.2
```

```
Iris-setosa
2             4.7           3.2            1.3           0.2
Iris-setosa
3             4.6           3.1            1.5           0.2
Iris-setosa
4             5.0           3.6            1.4           0.2
Iris-setosa
..            ...           ...            ...           ...
...
145           6.7           3.0            5.2           2.3  Iris-
virginica
146           6.3           2.5            5.0           1.9  Iris-
virginica
147           6.5           3.0            5.2           2.0  Iris-
virginica
148           6.2           3.4            5.4           2.3  Iris-
virginica
149           5.9           3.0            5.1           1.8  Iris-
virginica

[150 rows x 5 columns]
```

```
x=df.iloc[:,:-1].values
y=df.iloc[:,-1].values

from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.30,rand
om_state=0)

from sklearn.preprocessing import StandardScaler
S=StandardScaler()
S.fit(x_train)
x_train=S.transform(x_train)
x_test=S.transform(x_test)

from sklearn.svm import SVC
s=SVC()
s.fit(x_train,y_train)
y_pred=s.predict(x_test)
y_pred
```

```
array(['Iris-virginica', 'Iris-versicolor', 'Iris-setosa',
       'Iris-virginica', 'Iris-setosa', 'Iris-virginica', 'Iris-
setosa',
       'Iris-versicolor', 'Iris-versicolor', 'Iris-versicolor',
       'Iris-virginica', 'Iris-versicolor', 'Iris-versicolor',
       'Iris-versicolor', 'Iris-versicolor', 'Iris-setosa',
       'Iris-versicolor', 'Iris-versicolor', 'Iris-setosa', 'Iris-
setosa',
       'Iris-virginica', 'Iris-versicolor', 'Iris-setosa', 'Iris-
```

```
setosa',
       'Iris-virginica', 'Iris-setosa', 'Iris-setosa', 'Iris-
versicolor',
       'Iris-versicolor', 'Iris-setosa', 'Iris-virginica',
       'Iris-versicolor', 'Iris-setosa', 'Iris-virginica',
       'Iris-virginica', 'Iris-versicolor', 'Iris-setosa',
       'Iris-virginica', 'Iris-versicolor', 'Iris-versicolor',
       'Iris-virginica', 'Iris-setosa', 'Iris-virginica', 'Iris-
setosa',
       'Iris-setosa'], dtype=object)
```

```
print(s.predict([ [4.9,3.0,1.4,0.2] ]))
```

```
['Iris-virginica']
```

```
from sklearn.metrics import accuracy_score
acc=accuracy_score(y_test,y_pred)
acc
```

```
0.9777777777777777
```