

```
In [ ]: #1 Importing the libraries
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.svm import SVR, SVC
from sklearn import datasets
#2 Importing the dataset
dataset = pd.read_csv('Position_Salaries.csv')
X = dataset.iloc[:,1:2].values.astype(float)
y = dataset.iloc[:,2:3].values.astype(float)
#3 Feature Scaling
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
X = sc.fit_transform(X)
y = sc.fit_transform(y)
regressor = SVR(kernel='rbf')
regressor.fit(X, y)
```

```
c:\Users\DELL\AppData\Local\Programs\Python\Python38\lib\site-packages\sklearn\utils\validation.py:72: DataConversionWarning: A column-vector y was passed when a 1d array was expected. Please change the shape of y to (n_samples, ), for example using ravel().
    return f(**kwargs)
```

```
Out[ ]: SVR()
```

```
In [ ]: print('Support Vector Regression Accuracy', regressor.score(X, y))
```

```
Support Vector Regression Accuracy 0.7516001070620798
```

```
In [ ]: # Load the data set; In this example, the breast cancer dataset is loaded.
bc = datasets.load_breast_cancer()
X = bc.data
y = bc.target

# Create training and test split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=1)
sc = StandardScaler()
sc.fit(X_train)
X_train_std = sc.transform(X_train)
X_test_std = sc.transform(X_test)

# Instantiate the Support Vector Classifier (SVC)
svc = SVC(C=1.0, random_state=1, kernel='linear')

# Fit the model
svc.fit(X_train_std, y_train)
```

```
Out[ ]: SVC(kernel='linear', random_state=1)
```

```
In [ ]: from sklearn.metrics import accuracy_score, confusion_matrix
pred = svc.predict(X_test_std)
print('Support Vector Classifier Accuracy', accuracy_score(pred, y_test))
```

```
Support Vector Classifier Accuracy 0.9532163742690059
```

```
In [ ]: print('confusion_matrix\n', confusion_matrix(pred, y_test, labels=[0, 1]))
```

```
confusion_matrix
[[ 58   2]
 [  6 105]]
```

