K-Fold Cross Validation

In [1]:
```python
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

In [2]:
```python
dataset = pd.read_csv(r"C:\Users\JANHAVI\Desktop\Social_Network_Ads.csv")
X = dataset.iloc[:, [2, 3]].values
y = dataset.iloc[:, -1].values
```

In [3]:
```python
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
X = sc.fit_transform(X)
```

In [4]:
```python
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.25, random_
```

In [5]:
```python
from sklearn.svm import SVC
classifier = SVC(kernel = 'rbf', random_state = 0)
classifier.fit(X_train, y_train)
```

Out[5]:
```
▼  SVC  ⓘ ❓

▶ Parameters
```

In [10]:
```python
y_pred = classifier.predict(X_test)
```

In [11]:
```python
from sklearn.metrics import confusion_matrix
cm = confusion_matrix(y_test, y_pred)
print(cm)
```

```
[[64  4]
 [ 3 29]]
```

In [12]:
```python
from sklearn.model_selection import cross_val_score
accuracies = cross_val_score(estimator = classifier, X = X_train, y = y_train, cv =
print("Accuracy: {:.2f} %".format(accuracies.mean()*100))
print("Standard Deviation: {:.2f} %".format(accuracies.std()*100))
```

```
Accuracy: 90.00 %
Standard Deviation: 6.83 %
```

In [ ]:

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