Model Evaluation

Accuracy Score

In Classification, **Accuracy Score** is the ratio of **number of correct predictions** to the **total number of input data points.**

$$\text{Accuracy Score} = \frac{\text{Number of correct predictions}}{\text{Total Number of data points}} \times 100\ \%$$

Number of correct predictions = 128

Total Number of data points = 150

Accuracy Score = 85.3 %

```
from sklearn.metrics import accuracy_score
```

Mean Squared Error

Mean Squared Error measures the average of the squares of the errors, that is, the average squared difference between the estimated values and the actual value.

$$\text{MSE} = \frac{1}{n}\sum_{i=1}^{n}(Y_i - \hat{Y}_i)^2$$

Actual Value (Y_i = 140 mg/dL)

Predicted Value (Y_i = 160 mg/dL)

```
from sklearn.metrics import mean_squared_error
```