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# Exp 6: Assessing the Quality of the Model using various Metrics (score, confusion matrix, F-score, etc..)

**AIM:** To Understand and Assess the quality of the model using Evaluation Metrics.

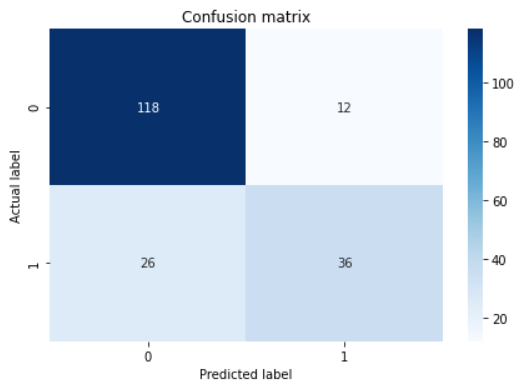
**Problem Description:**

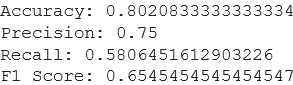
We have a Diabetes dataset that has features like Pregnancies, Insulin, BMI, Age, Glucose, blood pressure, DiabetesPedigreeFunction, and target variable ‘Outcome’ which is binary(0/1). A simple logistic regression model can be used to predict whether the patient is diabetic or not. To assess the model, Performance Evaluation metrics such as Confusion Metrics, Accuracy, Precision, Recall, F1 score, etc can be used.

**Procedure:**

1. Import the required Libraries
2. Import and Load the Dataset
3. Select Features
4. Split the Dataset into Train and Test Data
5. Apply the Logistic Regression to the dataset using the method LogisticRegression() from sklearn.linear\_model
6. Evaluate the model using a Confusion matrix
7. Visualize the Confusion matrix using the heatmap
8. Evaluate the model using model evaluation metrics such as Accuracy, Precision, Recall, and F1 Score

**Results:**

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