**[Que-50.15]** - **What is a confusion matrix and how is it used?**

### **Confusion Matrix**

**Definition:** A confusion matrix is a table used to evaluate the performance of a classification model.

**Components:**

* True Positives (TP): Correctly predicted positive instances.
* True Negatives (TN): Correctly predicted negative instances.
* False Positives (FP): Incorrectly predicted positive instances.
* False Negatives (FN): Incorrectly predicted negative instances.

**Usage:**

* Helps calculate performance metrics such as accuracy, precision, recall, and F1-score.