**1. Confusion Matrix Analysis**

* The confusion matrix shows how well the model predicts each class.
* **Diagonal values** represent correct predictions (**True Positives**).
* **Off-diagonal values** represent incorrect predictions (**False Positives** or **False Negatives**).

**🚨 Key Observations:**

1. **High Accuracy for Class 21:**
   * Precision: **0.99**, Recall: **0.98**
   * The model performs exceptionally well on this class, with minimal misclassifications.
2. **Poor Performance on Minority Classes (0-8):**
   * **Class 1:** Precision: **0.73**, Recall: **0.55** → Many false negatives.
   * **Class 6:** Precision & Recall: **0.44** → Struggles to detect this class.
3. **Classes with Moderate Performance:**
   * **Class 15 (0.88 Precision, 0.87 Recall):** Good balance.
   * **Class 19 (0.70 Precision, 0.64 Recall):** Needs improvement.
4. **Imbalanced Class Distribution:**
   * Classes like **21** dominate the dataset, making it easier to predict.
   * Minority classes suffer due to underrepresentation.