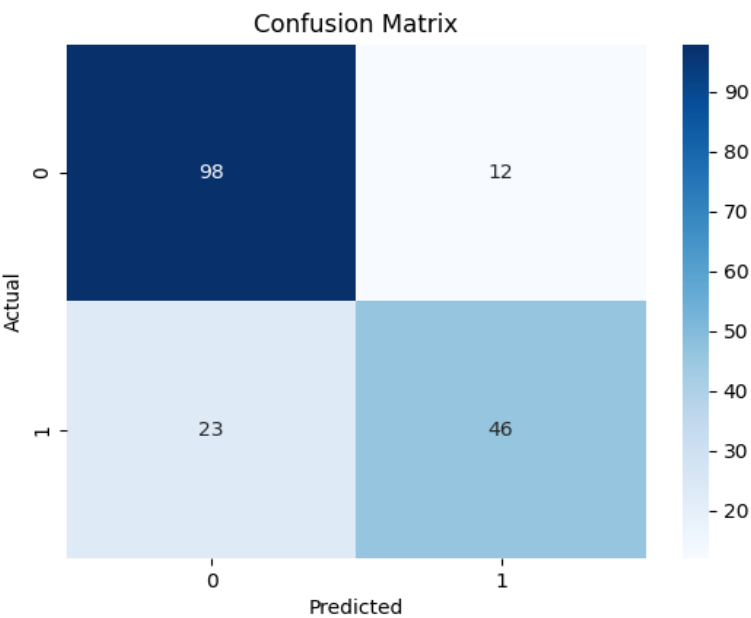# Titanic Survival Prediction – Logistic Regression Analysis

This report presents a Logistic Regression model developed to predict passenger survival based on demographic and travel-related features.
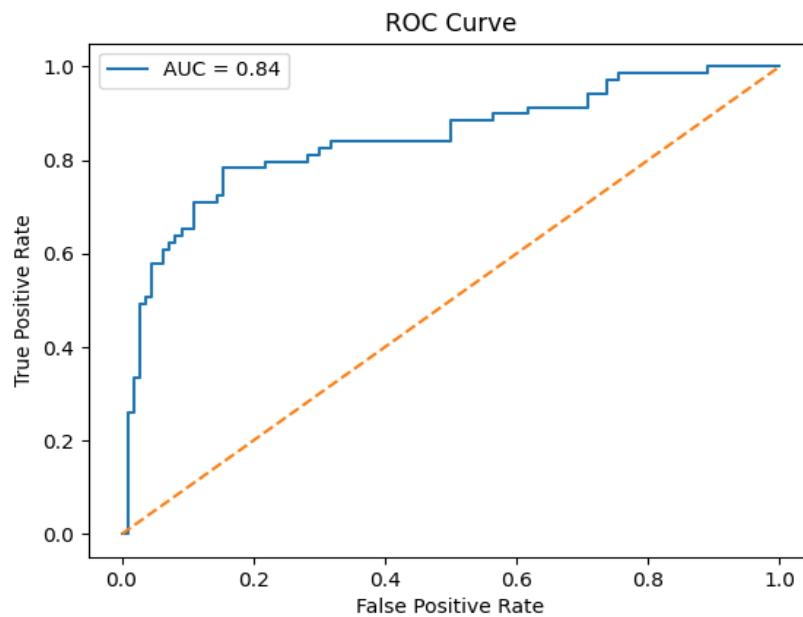
Accuracy: 0.80
Precision: 0.79
Recall: 0.67
F1-score: 0.72

Confusion Matrix

The confusion matrix summarizes correct and incorrect survival predictions made by the model.

ROC Curve and AUC Analysis

The ROC curve evaluates classification performance across thresholds. The AUC score of 0.84 indicates strong ability to distinguish between survivors and non-survivors.