

## Experiment 8

### **Supervised Learning Using Logistic Regression in R**

#### **Objective:**

To implement a supervised classification model using Logistic Regression and evaluate its performance on a real-world dataset.

Dataset: Titanic Survival Dataset

#### **Exercise:**

Build and evaluate a logistic regression model to predict passenger survival on the Titanic.

- Apply preprocessing to dataset
- Fit and evaluate a logistic regression model
- Understand how categorical and continuous variables affect model performance

#### **Expected Output**

- Model Summary
- Confusion Matrix
- Accuracy and other metrics