

START

STEP 1: Import required libraries

- Import pandas
- Import train\_test\_split from sklearn.model\_selection
- Import StandardScaler from sklearn.preprocessing
- Import LogisticRegression from sklearn.linear\_model
- Import accuracy\_score and classification\_report from sklearn.metrics

STEP 2: Load dataset

- Read CSV file "dataset.csv" into dataframe df
- Display "Dataset loaded successfully"
- Display column names of df

STEP 3: Take target column input

- Ask user to enter target column name
- IF entered column name is NOT present in df columns
  - Display "Invalid column name"
  - EXIT program
- ELSE
  - Display confirmation of selected target column

STEP 4: Separate features and target

- Set X = all columns except target column
- Set y = target column

STEP 5: Split dataset into training and testing sets

- Split X and y into:
  - X\_train, X\_test, y\_train, y\_test
- Use 80% data for training and 20% for testing

STEP 6: Scale features

- Create StandardScaler object
- Fit scaler on X\_train and transform X\_train → X\_train\_scaled
- Transform X\_test using same scaler → X\_test\_scaled

STEP 7: Train Logistic Regression model

- Create LogisticRegression model with max\_iter = 1000
- Train model using X\_train\_scaled and y\_train

STEP 8: Make predictions

- Use trained model to predict y\_pred from X\_test\_scaled

STEP 9: Evaluate model performance

- Calculate accuracy using y\_test and y\_pred
- Display accuracy
- Generate classification report
- Display classification report

END