# Import necessary libraries

Import pandas as Pd

From sklearn.model\_selection import train\_test\_split

From sklearn.preprocessing import StandardScaler

From sklearn.ensemble import RandomForestClassifier

From sklearn.metrics import accuracy\_score, confusion\_matrix, classification\_report

# Load the dataset

# Replace 'your\_dataset.csv' with your actual dataset file

Dataset = pd.read\_csv ('your\_dataset.csv')

# Separate features (X) and target variable (y)

X = dataset. Drop ('Class', axis=1) # Assuming 'Class' is the target column

y = dataset ['Class']

# Split the dataset into training and testing sets

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.2, random\_state=42)

# Standardize the features (important for some algorithms)

scaler = StandardScaler()

X\_train = scaler.fit\_transform(X\_train)

X\_test = scaler.transform(X\_test)

# Train a Random Forest classifier

random\_forest\_classifier = RandomForestClassifier(n\_estimators=100, random\_state=42)

random\_forest\_classifier.fit(X\_train, y\_train)

# Make predictions on the test set

predictions = random\_forest\_classifier.predict(X\_test)

# Evaluate the model

Accuracy = accuracy\_score (y\_test, predictions)

Print (f'Accuracy: {accuracy: .2f}')

# Display confusion matrix and classification report

conf\_matrix = confusion\_matrix(y\_test, predictions)

print('\nConfusion Matrix:')

print(conf\_matrix)

print('\nClassification Report:')

print(classification\_report(y\_test, predictions))