## Sri Sivasubramaniya Nadar College of Engineering, Chennai

(An autonomous Institution affiliated to Anna University)

Degree & Branch	M.Tech - Computer Science & Engineering Semester V		V
Subject Code & Name	ICS1512 & Machine Learning Algorithms Laboratory		
Academic year	2025-2026 (Odd)	Batch:2023-2028	Due date:

# Experiment 1: Working with Python packages – Numpy, Scipy, Scikit-learn, Matplotlib

### Aim:

To work with Python packages - Numpy, Scipy, Scikit-learn, Matplotlib by exploring the UCI repository and kaggle datasets to perform the specified Task.

#### Libraries used:

- Numpy
- Scipy
- Scikit-learn
- Matplotlib

## Objective performed:

To learn about the Exploratory Data Analysis(EDA) and gain knowledge on Model Selection for Specific task

#### Results and Discussions:

Dataset	Type of ML task	Suitable ML Algorithm	
Iris Dataset	Classification	Logistic Regression	
Loan Amount Prediction	Regression	Linear Regression	
Predicting Diabetes	Classification	Logistic Regression	
Classification of Email Spam	Classification	Naive Bayes / KNN	
Handwritten Character Recognition / M	NIST Classification	SVM or Convolutional Neural Networks	

Table 1: Datasets and Suitable ML Algorithms

## Learning Practices:

- I have Learnt to perform EDA.
- I am able to select suitable model for particular Task.
- I have Practiced the basics of Python(Pandas, Numpy) and visualization tasks.