	COMPUTER SCI CIAL INTELLIG		DEPARTMENT OF COMPUTER SCIENCE ENGINEERING			
Program Name: B. Tech		Assignment Type: Lab		Academic Year: 2025-26		
Course Coordinator Name		Dr.Vairachilai Shenbagavel				
Instructor(s) Name		Srinivas Komakula				
Course Code	23CA201SE402	Course Titl	e Explainable A	Explainable AI(P)		
eYear/Sem	III/V	Regulation	R24	R24		
Date and Day of Assignment	21-08-2025	Time(s)	09:00AM -05:00	09:00AM -05:00PM		
Duration	2 Hours	Applicable t Batches	23CSBTB42			

**Assignment Number: 02** 

Q. No.	Question	Expected Time to complete
1	Assignment Problem 1: Spam Email Detection	

### **Problem Statement:**

SMS Spam dataset predicts spam/ham. LIME highlights spam words.

#### Tasks:

- 1. Load dataset
- 2. Train Logistic Regression
- 3. Apply LIME Text
- 4. Highlight words

#### **Deliverables:**

- Code
- Outputs
- Report

2	Assignment Problem 2: Airline Passenger Satisfaction	
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### **Problem Statement:**

Airline dataset predicts satisfaction. LIME explains service-related features.

# Tasks:

- 1. Load dataset
- 2. Train Gradient Boosting
- 3. Apply LIME
- 4. Interpret contributions

# **Deliverables:**

- Code
- Outputs
- Report