SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE			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 AI (I	Explainable AI (P)		
Year/Sem	III/V	Regulation	R24			
Date and Day of Assignment	21-08-2025	Time(s)	09:00AM -05:00I	09:00AM -05:00PM		
Duration	2 Hours	Applicable 1 Batches	23CSBTB38			

Assignment Number: 02

Q. No.	Question	Expected Time to complete
1	Assignment Problem 1: Customer Churn Prediction	

Problem Statement:

Churn dataset predicts leaving customers. LIME explains churn drivers.

Tasks:

- 1. Load dataset
- 2. Train Logistic Regression
- 3. Apply LIME
- 4. Interpret churn factors

Deliverables:

- Code
- Outputs
- Report

2	Assignment Problem2: Retail Purchase Prediction	

Problem Statement:

Retail dataset predicts purchase. LIME highlights marketing features.

Tasks:

- 1. Load dataset
- 2. Train Random Forest
- 3. Apply LIME
- 4. Interpret results

Deliverables:

- Code
- Outputs
- Report