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 Title	Explainable AI (P)	
Year/Sem	III/V	Regulation	R24	
Date and Day of Assignment	21-08-2025	Time(s)	09:00AM -05:00PM	
Duration	2 Hours	Applicable to Batches	23CSBTB32	
Assignment Number: 03				

Problem 1: Titanic Assignment Survival Prediction

Titanic dataset predicts survival. LIME explains individual outcomes.

Tasks:

- 1. Load Titanic dataset
- 2. Train Gradient Boosting
- 3. Apply LIME
- 4. Visualize probabilities
- 5. Write analysis

Deliverables:

- Code
- Outputs

Report 200 words

2 **Assignment Problem 2: Diabetes Prediction**

Problem Statement: Diabetes dataset predicts diabetic vs non-diabetic. LIME highlights medical risk factors.

Tasks:

- 1. Load Diabetes dataset
- 2. Train Logistic Regression
- 3. Explain with LIME
- 4. Visualize contributions
- 5. Interpret results

Deliverables:

- Code
- Outputs
- Medical interpretation