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** 23CSBTB36

Assignment Number:3

1	**Assignment Problem 1: Air Quality Prediction**	

Problem Statement:
Air Quality dataset predicts safe/unsafe air. LIME explains which pollutants matter.

Tasks
1. Load dataset
2. Train model
3. Explain with LIME
4. Visualize contributions
5. Discuss health context

Deliverables:
- Code
- Outputs
- Report

2	**Assignment Problem 2: MNIST Digit Classification**	

Problem Statement:
MNIST dataset predicts handwritten digits. LIME Image highlights pixels.

Tasks:
1. Load MNIST
2. Train CNN
3. Apply LIME Image
4. Visualize regions

Deliverables:
- Code
- Image outputs
- Report