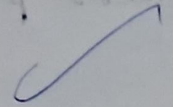
Epoch	Loss
1	3.95
5	2.40
10	1.55
20	0.82
30	0.48
40	0.35



Exp - 15 Implement a YOLO model to detect object

AIM: To implement a YOLO model to detect object

Objective

To study how YOLO detect multiple objects in a single image
To understand the architecture and working a pre-trained YOLO model
To use transfer learning for custom object detection

Pseudocode

Install and import (YOLO package)
Load a pre-trained YOLO model
Load a test image or use a camera frame
Run the model.predict() method to detect objects
Display bounding boxes and class labels
Save the annotated ~~out~~ output-image

Observation

The pre-trained YOLO v8 model successfully detected multiple objects such as cars, buses, person in single frame
Each object was enclosed in a bounding box with a class label confidence score
The inference time per image was very low
The model demonstrated strong generalization without additional training

The visualization clearly showed YOLO's ability to detect overlapping objects in complex scenes.

Result:

Successfully implemented the YOLO model