# PART 1 ASSIGNMENT

1. Artificial intelligence is a system or machine that mimics human intelligence to perform tasks and can improve themselves based on the information they collect.

2. Machine Learning focuses on training machines to learn patterns from data without explicit programming while deep learning uses neural networks with many layers to learn patterns from data.

3. Supervised learning means learning with labeled data (e.g., classifying emails as spam or not spam), Supervised learning means Learning without labels (e.g., grouping similar customers in marketing) while reinforcement learning means Learning through trial and error (e.g., game-playing AIs like AlphaGo).

4. Computer Vision: Deep learning is widely used for image recognition, object detection, face recognition, and medical image analysis.

5. Discriminative models distinguish different classes or labels in the data, while generative models not only classify the data but also model how the data is generated.