Answer 1: Machine Learning (ML) is a branch of artificial intelligence (AI) that enables computers to learn from data, improve their performance over time without being explicitly programmed, and make predictions or decisions based on patterns in the data.

Answer 3: Gradient Descent is an optimization algorithm used to minimize a loss function (or cost function). It adjusts the model's parameters iteratively by moving in the direction of the negative gradient of the function, which leads to a local minimum or optimal solution.

Answer 5: Classification is a supervised learning task where the model predicts discrete labels or categories. The goal is to assign new data points to one of the predefined classes. Example: Email spam detection, where emails are classified as "spam" or "not spam."