MACHINE LEARNING LIFECYCLE:
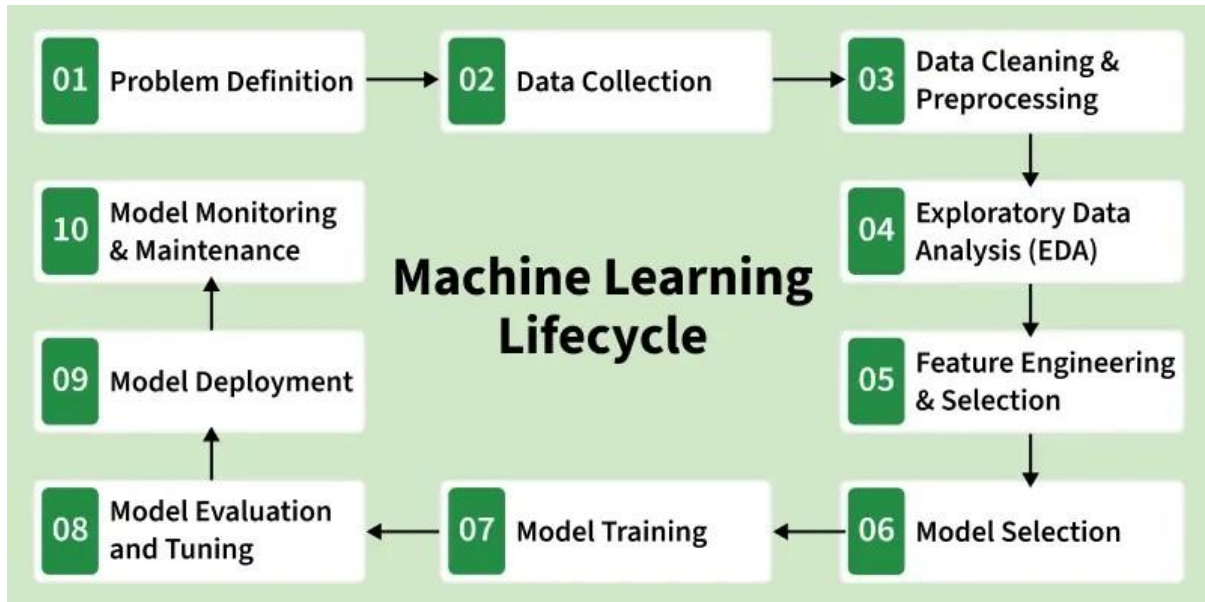

1.Problem definition: Understand the problem, objectives, scope and success criteria; desired outcomes clarity

2.Data Collection: relevant, quality, quantity, diversity

3.Data Cleaning and preprocessing: issue like missing values, outliers and inconsistencies in the data: standardise formats, scaling, encode categorical variables; well organized

4.EDA : using statistical and visual tools, understand underlying patterns, insights

5.Feature Engineering: create new or transform features, selection, optimization

6.Model selection: complexity, decision factor, experimentation

7.Model training: iteration, optimisation, validation

8.Model Evaluation and training: evaluation metrics, strengths and weakness, iterative improvement, robustness

9.Model deployment

10.Model monitoring and Maintenance: track model, detect drift, update and retrain model, maintain logs