***LOAN******ELIGIBILITY PREDICTION USING AI /ML***

**PROBLEM STATEMENT:**

Financial institutions such as banks and lending companies receive thousands of loan applications every month, and the approval process usually depends on manual verification of applicant details such as income, employment history, credit score, and other personal information. This traditional approach is slow, error-prone, and often influenced by human bias, which can lead to inconsistent and delayed decisions. With the rising demand for faster and more reliable financial services, there is a strong need for an automated and data-driven system to predict loan eligibility.

This project aims to build a machine learning model that can automatically determine whether an applicant is eligible or not for a loan by analyzing their profile details. Important factors such as income, employment status, credit history, loan amount, and repayment capacity will be used to train the model on historical application data. Once trained, the model can recognize patterns in the data and make accurate predictions for new applicants. The system will apply machine learning algorithms for binary classification, dividing applicants into eligible and not eligible categories. The performance will be measured using evaluation metrics like accuracy, precision, recall, and F1-score to ensure the reliability of predictions. The expected outcome is an efficient and unbiased loan eligibility prediction system that reduces manual effort, speeds up processing, minimizes risk, and provides consistent results, ultimately improving decision-making in financial institutions.