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BRANCH – B.TECH CSE
SEM – 4TH
SEC- 615 "B"
SUBJECT - AI

Q - Does AI aim to put the human mind into the computer?

This problem statement can be solved using the KNN algorithm, which will classify the applicant's loan request into two classes:

1. Approved
2. Disapproved

K Nearest Neighbour is a Supervised Learning algorithm that classifies a new data point into the target class, depending on the features of its neighboring data points.

The following steps can be carried out to predict whether a loan must be approved or not:

Data Extraction: At this stage data is either collected through a survey or web scraping is performed. Data about the customers must be collected. This includes their account balance, credit amount, age, occupation, loan records, etc. By using this data, we can predict whether or not to approve the loan of an applicant.

Data Cleaning: At this stage, the redundant variables must be removed. Some of these variables are not essential in predicting the loan of an applicant, for example, variables such as Telephone, Concurrent credits, etc. Such variables must be removed because they will only increase the complexity of the Machine Learning model.

Data Exploration & Analysis: This is the most important step in AI. Here you study the relationship between various predictor variables. For example, if a person has a history of unpaid loans, then the chances are that he might not get approval on his loan applicant. Such patterns must be detected and understood at this stage.

Building a Machine Learning model: There are n number of machine learning algorithms that can be used for predicting whether an applicant loan request is approved or not. One such example is the K-Nearest Neighbor, which is a classification and a regression algorithm. It will classify the applicant's loan request into two classes, namely, Approved and Disapproved.

Model Evaluation: Here, you basically test the efficiency of the machine learning model. If there is any room for improvement, then parameter tuning is performed. This improves the accuracy of the model.