IDEATION - University Admit Eligibility Predictor

The three best ideas, based on feasibility and importance:

- **Using K-Nearest Neighbors Algorithm:** It is an algorithm that is used widely for classification and regression problems. Due to its simplicity and effectiveness, it is easy to implement and understand. Distance is calculated between the unseen data sample and the all-other data samples already present in the data set. Depending on the value of K, the many nearest neighbors are selected, and their class is identified. Multiple values of K should be tried and tested, and the value of K at which the best performance is observed must be selected for the model. Thiswill help find the best university option.

- **Using Logistic Regression:** Logistic regression algorithm is used to identify the probability of occurrence of an event based on a single predictor variable. Multivariate Logistic regression can be used to determine the probability of the occurrence of an event based on multiple predictor variables. Logistic Regression is also a supervised machine learning algorithm that used data with predetermined classes to create a model and perform predictive analysis on unseendata.

- **Using Decision Tree:** It is a supervised machine learning algorithm. Due to its simple logic, effectiveness, and interoperability, it is the most widely used classification algorithm. The model works by creating a tree-like structure by dividing the data set into several smaller subsets based on different conditional logic. The main components of the decision tree are the decision nodes, leaf nodes, and branches. Different university choices can be different nodes and one canbe picked.