Summary Report

An X Education need help to select the most promising leads, i.e. the leads that are most likely to convert into paying customers. The company requires us to build a model wherein you need to assign a lead score to each of the leads such that the customers with higher lead score have a higher conversion chance and the customers with lower lead score have a lower conversion chance. The CEO, in particular, has given a ballpark of the target lead conversion rate to be around 80%

1. **Following steps were performed to generate the inferences.**

   Analysis Approach:

   a. Reading the dataset
   b. Inspecting the dataset
   c. Implementing Exploratory Data Analysis
   d. Doing Transformations
   e. Train Test Split
   f. Building ML Model using Logistic Regression
   g. Evaluating the Model and generating Inferences

2. When the Company has limited time and resources, it should approach Hot_leads i.e. those leads who have more than 80% of conversion chances to achieve maximum conversion & to avoid useless phone calls.

3. When the company has ample amount of resources and time in its hand, then it should approach all the Potential Leads. But since it has sufficient time in its hand, it should also focus on customers who have lesser conversion rate to improve the overall conversion rate of the leads.

4. The strategy, company should follow is:

Sahil Sharma Paramjit Shankarprasad Haider Ali

a. Do not focus on unemployed leads. They might not have a budget to spend on the course
b. Do not focus on students, since they are already studying and would not be willing to enroll into a course specially designed for working professionals, so early in the tenure.

5. Target leads that spend a lot of time on X-Education site (Total Time Spent on
Website) Target leads that repeatedly visit the site (Page Views Per Visit). However they might be repeatedly visiting to compare courses from the other sites, as the number of visits might be for that reason. So the interns should be a bit more agressive and should ensure competitive points where X-Education is better, are stringly highlighted.

6. Target leads that have come through References as they have a higher probability of converting Students can be approached, but they will have a lower probability of converting due to the course being industry based. However, this can also be a motivating factor to ensure industry readiness by the time they complete their education
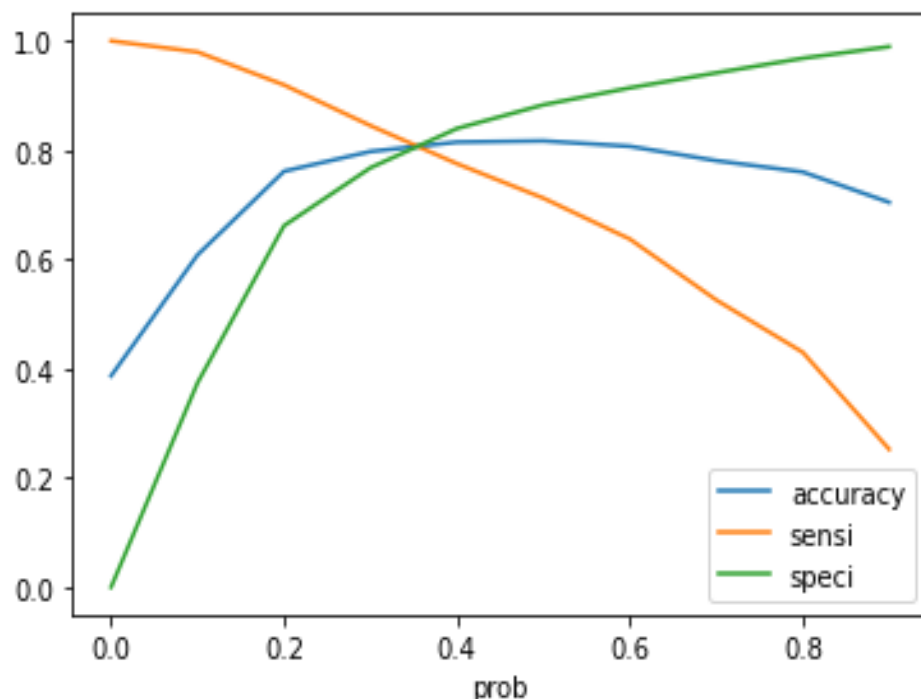
With the cut off as 0.35 we have accuracy of 82%, sensitivity of 71% and specificity of around 88%.