1. **Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?**

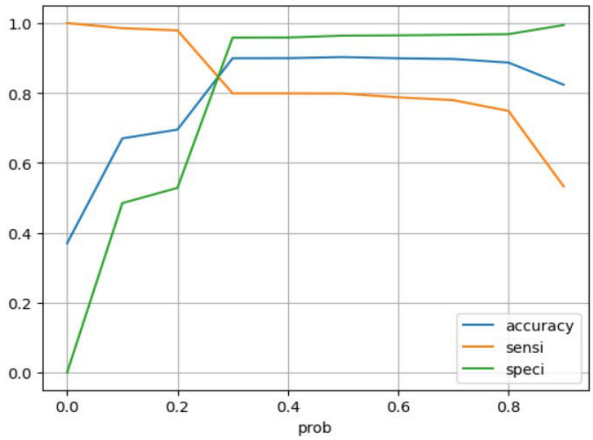
   The top three variables in the model which contribute most towards the probabiliy of a lead getting converted are as follows -
   - Tags_Closed by Horizzon
   - Tags_Lost to EINS
   - Tag_We will revert after reading the email

2. **What are the top 3 categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion?**

   The top 3 categorical/dummy variables in the model which should be focused the most on in oder to increase the probability of lead conversion are as follows -
   - Lead Quality_ Might Be
   - Lead Quality_Worst
   - Lead Quaiity_Not Sure

3. **X Education has a period of 2 months every year during which they hire some interns. The sales team, in particular, has around 10 interns allotted to them. So during this phase, they wish to make the lead conversion more aggressive. So they want almost all of the potential leads (i.e. the customers who have been predicted as 1 by the model) to be converted and hence, want to make phone calls to as much of such people as possible. Suggest a good strategy they should employ at this stage.**

   Our model has computed the sensitivity and specificity at various probability levels. Refer the below image -



   Sensitivity is the ratio of total number of actual conversions correctly predicted to the

total number of actual conversions. Also Specificity is the ratio of total number of actual non-conversions correctly predicted to the total number of actual non-conversions. This 2 values are inversely related to each other.

As seen in the above image , the sensitivity is high at lower probabilities. That means our model will correctly identify almost all the leads who are likely to convert by over estimating the conversion likelihood.

Since X-Education sales team has 10 interns allocated to them for 2 months , they can take advantage of higher manpower in this period , and make phone calls to the higher number of predicted potential conversions identified by keeping lower probability value.

4. **Similarly, at times, the company reaches its target for a quarter before the deadline. During this time, the company wants the sales team to focus on some new work as well. So during this time, the company's aim is to not make phone calls unless it's extremely necessary, i.e. they want to minimize the rate of useless phone calls. Suggest a strategy they should employ at this stage.**

In the scenario where the company has reached its target for a quarter before deadline and does not want to make phone calls unless extremely necessary , X-Education can now employ reverse strategy wherein they choose higher threshold value for Conversion Probability i.e . high specificity and low sensitivity. This will ensure that the potential leads which are on the boarderline of getting converted are not chosen by the model thus avoiding the need to make unnecessary phone calls.