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

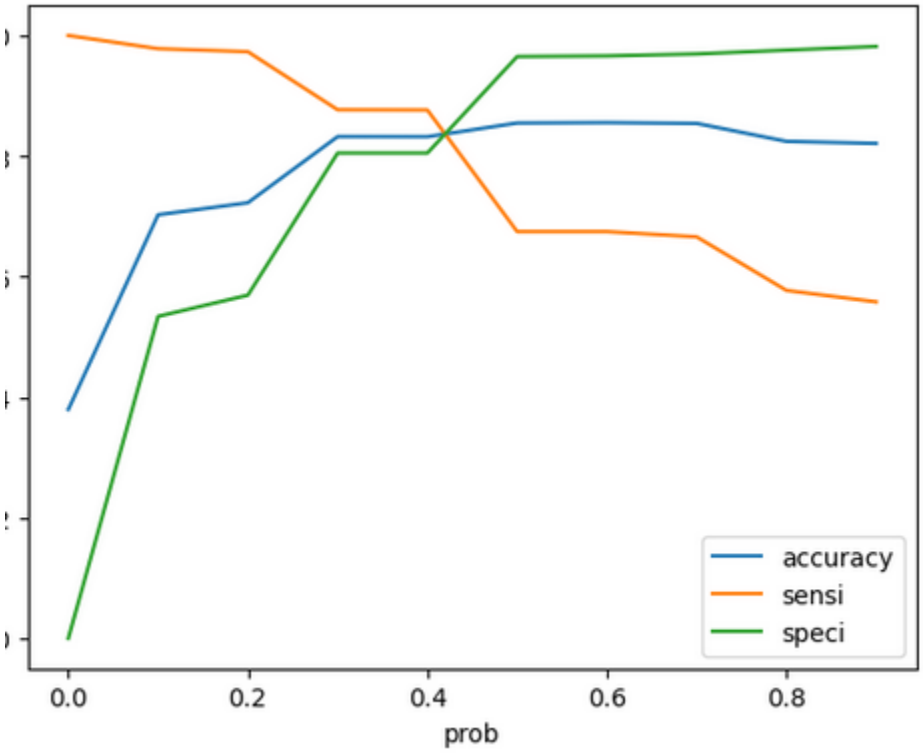
	coef	std err	z	P>|z|	[0.025	0.975]
const	-3.7858	0.190	-19.938	0.000	-4.158	-3.414
Do Not Email	-1.4895	0.179	-8.334	0.000	-1.840	-1.139
Lead Origin_Lead Add Form	2.5902	0.288	8.980	0.000	2.025	3.156
Lead Source_Welingak Website	1.7819	0.789	2.260	0.024	0.236	3.328
Last Activity_Had a Phone Conversation	1.9406	0.728	2.665	0.008	0.513	3.368
Specialization_Missing	-0.9713	0.082	-11.787	0.000	-1.133	-0.810
What is your current occupation_Working Professional	2.6031	0.233	11.177	0.000	2.147	3.060
Tags_Busy	2.9014	0.287	10.126	0.000	2.340	3.463
Tags_Closed by Horizzon	8.0042	0.740	10.823	0.000	6.555	9.454
Tags_Lost to EINS	8.1556	0.743	10.983	0.000	6.700	9.611
Tags_Ringing	-1.2711	0.298	-4.266	0.000	-1.855	-0.687
Tags_Will revert after reading the email	3.4754	0.191	18.169	0.000	3.101	3.850
Tags_switched off	-1.5894	0.622	-2.553	0.011	-2.809	-0.369
Last Notable Activity_SMS Sent	2.5752	0.106	24.355	0.000	2.368	2.782

   And based on the model output following are the top 3 variables:
   I. Tags_Closed by Horizzon
   II. Tags_Lost to EINS
   III. Tags_Will revert after reading the emai

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?
   Answer to this question is same as above, because the top 3 variables in my model are categorical variables
   And based on the model output following are the top 3 categorical/dummyvariables:
   I. Tags_Closed by Horizzon
   II. Tags_Lost to EINS
   III. Tags_Will revert after reading the emai

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.

This means we need to increase the sensitivity of the model, that is the ratio of actual conversion predicted out of the total actual conversions. We created below graph for sensitivity, specificity and accuracy



Based on this graph it is very clear that the lower the probability higher is the sensitivity, if **you keep the cutoff lower** then you will inc the sensitivity of the model. And you will also increase the conversion rate. Therefore, X education needs to make phone calls as much as possible.

But this will also result in overestimation because you will classify non-conversions as conversions.

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.

For this kind of problem we have another concept that is specificity, in our case that is number of actual non conversions predicted, out of the total non conversions.

In above case we need high specificity, specificity increases with the increase in probability. Therefore we should make phone calls only to higher probability leads.