1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
   ANS:
   Top 3 variables:

   1. Lead Source_Reference
   2. Total Time Spent on Website
   3. Last Notable Activity_SMS Sent

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?
   ANS:
   Top 3 variables to be focused on to increase the probability of lead conversion are,
   1. Lead Source (Reference).
   2. Total Time Spent on Website
   3. Last Notable Activity (SMS Sent)

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.

ANS:

As we observed from the model if we want to more conversion we need to consider lower lead score, If we want to cover 100% of the leads, then we should consider score from 0.If we want to cover around 97% o he leads then we should consider lead scores above 10.As we can see below we can choose the lead score based on our requirement here sensitivity tells us the percentage of leads predicted correctly.

	LeadScore	accuracy	sensitivity	specificity
0.00	0.0	38.129268	100.000000	0.000000
0.05	5.0	43.814515	99.583507	9.445585
0.08	8.0	52.945847	98.375677	24.948665
0.10	10.0	55.629665	97.334444	29.928131
0.20	20.0	68.572336	91.753436	54.286448
0.30	30.0	77.147848	80.841316	74.871663
0.40	40.0	79.005876	75.551853	81.134497
0.50	50.0	78.640623	66.055810	86.396304
0.60	60.0	77.338415	55.518534	90.785421
0.70	70.0	74.225822	40.566431	94.969199
0.80	80.0	72.002541	31.320283	97.073922
0.90	90.0	68.127680	18.117451	98.947639
0.95	95.0	64.141655	6.455643	99.691992
0.99	99.0	62.045418	0.458142	100.000000

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.

   ANS:

   As we observed from the model if we want to precise conversion we need to consider higher lead score, If we want to be 98% accurate , then we should consider score from 90 or above.If we want to be around 100% accurate leads then we should consider lead scores above 99 .As we can see below we can choose the lead score based on our requirement.

   As we can see below we can choose the lead score based on our requirement here specificity tells us the percentage of non-leads predicted correctly.

	LeadScore	accuracy	sensitivity	specificity
0.00	0.0	38.129268	100.000000	0.000000
0.05	5.0	43.814515	99.583507	9.445585
0.08	8.0	52.945847	98.375677	24.948665
0.10	10.0	55.629665	97.334444	29.928131
0.20	20.0	68.572336	91.753436	54.286448
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0.90	90.0	68.127680	18.117451	98.947639
0.95	95.0	64.141655	6.455643	99.691992
0.99	99.0	62.045418	0.458142	100.000000