1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
   Ans:
   - Major Indicators that a lead will get converted into a Hot Lead:
     - **Lead_Source_Welingak website**: If the source of the lead is Welingak Website, then he is more likely to get converted into Hot lead.
     - **Lead_Source_Reference:** If the lead is referred through past referrals, then he is more likely to get converted into Hot lead.
     - **Occupation_Working Professional:** If the lead is working professional, then he is more likely to get converted into Hot lead.
   - Major indicators that a lead will **not** get converted into a Hot Lead:
     - **Last_Activity_Email bounced:** If last activity performed by the customer is bouncing of email, then he is less likely to get converted into Hot lead.
     - **Last_Activity_Olark chat conversation:** Customer who had olark chat conversion, are less likely to get converted into Hot leads.
     - **Last_Notable_Activity_Modified:** The customers who have modified something are also not likely to get converted into Hot leads

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:
   Below are the top 3 categorical/dummy variables in the model which should be focused the most.
   - Major Indicators that a lead will get converted into a Hot Lead:
     - **Lead_Source_Welingak website**: If the source of the lead is Welingak Website, then he is more likely to get converted into Hot lead.
     - **Lead_Source_Reference:** If the lead is referred through past referrals, then he is more likely to get converted into Hot lead.
     - **Occupation_Working Professional:** If the lead is working professional, then he is more likely to get converted into Hot lead.
   - Major indicators that a lead will **not** get converted into a Hot Lead:
     - **Last_Activity_Email bounced:** If last activity performed by the customer is bouncing of email, then he is less likely to get converted into Hot lead.
     - **Last_Activity_Olark chat conversation:** Customer who had olark chat conversion, are less likely to get converted into Hot leads.
     - **Last_Notable_Activity_Modified:** The customers who have modified something are also not likely to get converted into Hot leads.

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:
   - We can use our logistic regression model with Sensitivity and Specificity Score as ~81% to predict the lead score. Our model has the **optimal lead score as 38** to identify the customers which can be turned into hot leads or not.
   - Hence, as X Education have more resources for a period of 2 months, we can use these resources to target those customers which have lead score around 38 intensely.
   - This is mainly because, these are the customers who have lead score around 38 and our model predicted those customers as hot leads, but might be in confusion and revert their decision to turn into hot leads.
   - We can use our resources to take efforts and focus more on these customers who have lead score range around 38 to 50 or 60 if possible.


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:
   - The CEO has given a ballpark of the target lead conversion rate to be around 80%. We have achieved the target as our model has Sensitivity Score ~81%, hence we already have very minimal rate of useless phone calls.
   - Yet we can target the customers based on the top features that our model predicted. e.g Target those customers arrived from Welingak Website, referrals from previous customers, those who are working professionals, those who already had a phone call.
   - Also, we can only target the customers who have a high lead score around 70 to 100 to minimize the rate of useless phone calls.
   - In this way, we can target only specific customers so that we can avoid useless phone calls and make phone calls only when it's extremely necessary.