1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
   Ans- Here are the top three variables and their corresponding coefficients:
   a. TotalVisits: 9.0912
   b. Total Time Spent on Website: 4.5516
   c. Lead Origin_Lead Add Form: 3.6853

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- The top three categorical/dummy variables and their coefficients:
   a. Lead Origin_Lead Add Form: 3.6853
   Potential leads are identified through add forms.

   b. What is your current occupation_Working Professional: 2.8023
   Working professionals are most likely to convert.

   c. Lead Source_Welingak Website: 1.9524
   Leads sourced from the Welingak website are particularly helpful.

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-
   - False Positives: labelling lead as converted even though he is not.
   - False Negatives: labelling potential lead who will convert as will not convert.
   - True positives: Labelling potential lead who will convert as convert.
   - True negatives: Labelling lead who will convert as will not convert.
   - In this case we need to build a model which identifies most of the potential leads. Which means we need a model with higher sensitivity.
   - To enhance sensitivity, our aim is to increase True Positives and decrease False Positives. This can be accomplished by lowering the probability cutoff of the model for labeling a lead as 1 (converted).
   - But this comes with a tradeoff which increases False Positives and decreases specificity. This will increase the number of calls to customers who will not convert.
   - Since we have 10 interns additionally, we can afford to make additional calls using them to reach out to most of the potential leads.
   - Additionally, we can look at independent variables and their co-efficient to decide whom to call.
   - Targeting customers who have higher total visits and total time spent on website.
   - Leads sources originating from add forms and targeting working professionals

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- In this use case, our goal is to minimize unnecessary calls to customers who are less likely to convert.
   To achieve this:
   - We aim to reduce False Positives, thus increasing specificity.
   - Increasing the probability cutoff to identify potential leads will help decrease False Positives.