1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
   Ans: Below are the top 3 variables and their 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: Top 3 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 like to convert
   c. Lead Source_Welingak Website: 1.9524
      - Lead source from welingak website are very 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.
      - We need to increase the True positives and decrease the number of False positives to increase sensitivity. We can achieve this by decreasing the probability cutoff of the model to label lead as 1 (converted)
      - But this comes with a tradeoff off which increases False Positives and decreases specificity. This will increase in 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 has 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.
    - In this use case we need to reduce the number of calls made unnecessarily to the customers who are less likely to convert
    - We need to decrease False positives in this case, so we need to increase specificity.
    - Increasing probability cutoff to identify potential leads will cause a decrease in False positives.