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

   TotalVisits, Total Time Spent on Website, and Lead Origin Lead Add Form are the three model features that contribute the most to the likelihood of a lead converting. The variables are listed in the order of importance.

   - TotalVisits
   - Total Time Spent on Website
   - Lead Origin Lead Add Form

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?

   Lead Origin_Lead Add Form, Last Activity_Had a Phone Conversation, What is your current occupation_Unemployed are the three categorical factors in the model on which the most emphasis should be placed to enhance the likelihood of lead conversion. The attributes are listed according to negative and positive influence on lead conversion.

   - Lead Origin_Lead Add Form - Positive
   - Last Activity_Had a Phone Conversation - Positive
   - What is your current occupation Unemployed - Negative

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.

   Ultimately, the team should be aware of the list of individuals with a higher chance of conversion whom they should contact within two months.
   The organization should use a machine learning model that can predict the likelihood of user conversion in order to identify its members.
   The model must be constructed or retrained based on the historical member demographic and activity data pertinent to the X Education course inquiry, as well as the conversion status.
   These procedures should be planned so that the model could be used when interims are deployed for work.

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.

   According to the model we developed, phone calls have some effect on the chance of user conversion. With this information, we may estimate the conversion rate of new users, supposing the phone contact has been made. Now, based on the outcome of the prediction, we may infer that the users who pass the threshold of 4.2 are the individuals for whom the phone call might work. This might not only reduce unnecessary phone calls, but also boost the likelihood of conversion.