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

The top three variables in the GBM model that contribute most towards the probability of a lead getting converted are:

1/ Total Time Spent on Website: This is the most important feature with the highest importance value. The longer a lead spends on the website, the higher the likelihood they are interested in the courses, which increases their chances of conversion.

2/ Lead Origin - Lead Add Form: Leads that come through the "Lead Add Form" have a significant impact on conversion. This might indicate that this channel is effective in attracting potential leads.

3/ Last Notable Activity - SMS Sent: If the last notable activity for a lead is that an SMS was sent to them, it considerably affects the likelihood of conversion. This suggests that sending SMS might be an effective strategy for engaging potential leads.

1. **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?**
   1. Answer:

The top three categorical/dummy variables in the GBM model that should be focused on the most to increase the probability of lead conversion are:

1/ Lead Origin - Lead Add Form: This dummy variable indicates whether a lead came through the "Lead Add Form". It has the highest importance among the categorical variables, suggesting that this channel is particularly effective in attracting high-quality leads.

2/ Last Notable Activity - SMS Sent: This indicates if the last notable activity for a lead was an SMS sent to them. The high importance of this variable suggests that sending SMS might be an effective strategy for engaging and converting potential leads.

3/ What is your current occupation - Working Professional: Leads that are currently working professionals tend to have a higher probability of conversion. This could be because working professionals might have a clearer understanding of their needs and the value proposition offered by the courses.

1. **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.**
   1. Answer:

Strategy that X Education can employ:

1/ Segmentation of Potential Leads:

1.1/ High Confidence Leads: These are leads that the model predicts with very high confidence (e.g., lead scores above 80). They are most likely to convert.

1.2/ Medium Confidence Leads: Leads with scores between 50 and 80. They have a good chance of converting, but may need more personalized attention.

1.3/ Low Confidence Leads: These are leads with scores between 30 and 50. They might convert with extra effort.

2/ Prioritize Calls:

2.1/ Immediate Calls: Start with the high confidence leads since they have the highest chance of conversion.

2.2/ Scheduled Calls: For medium confidence leads, schedule calls during times they are most likely to be free (based on any available data).

2.3/ Engagement Calls: For low confidence leads, the intent isn't immediately to convert but to engage and nurture.

3. Personalize the Approach:

3.1/ Use data to understand the background of the lead. For instance, a working professional might have different concerns compared to a student.

3.2/ Tailor the conversation based on the lead's last activity, source, and other available data.

1. **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.**
   1. Answer:

If the company has already reached its target and wants to minimize unnecessary phone calls, the strategy should be more conservative. Here's some approaches:

1/ High-Threshold Lead Scoring: Only reach out to leads with extremely high lead scores, e.g., those above 90 or 95. This ensures that the sales team is only focusing on leads that are almost certain to convert.

2/ Engage Through Automated Channels: Use automated email campaigns or SMS for engagement. This can keep potential leads nurtured without manual intervention. Use chatbots or automated systems on the website to answer common queries.

3/ Leverage Digital Content: Create engaging content like webinars, online workshops, or video tutorials. Encourage potential leads to engage with this content. This ensures they are still connected with X Education without direct sales team interaction.

4/ Refine and Clean the Database: Use this time to clean up the leads database. Remove outdated leads, merge duplicates, and update lead information. This ensures that when active lead engagement resumes, the team works with a clean and updated database.

5/ Re-Evaluate Lead Scoring Model: This is a good time to evaluate and refine the lead scoring model. By analyzing the leads that converted and those that didn’t in the past quarters, the model can be adjusted for better accuracy in the future.