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

   To determine the top three variables that contribute most towards the probability of a lead getting converted in a logistic regression model, we focus on the coefficients' absolute values. Higher absolute values indicate a stronger influence on the model.

   Top 3 variables based on their coefficients:
   1. Tags_Closed by Horizzon: 9.5875
   2. Tags_Lost to EINS: 7.7425
   3. Tags_Will revert after reading the email: 6.9136

   These variables have the highest positive coefficients, meaning they significantly increase the probability of a lead getting converted.

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?**

   To identify the top 3 categorical/dummy variables that should be focused on to increase the probability of lead conversion, we consider the positive coefficients in the logistic regression model.
   In our case, these top 3 categorical features are the same as top overall features captured in Question 1.

   Top 3 categorical/dummy variables to focus on:
   1. Tags_Closed by Horizzon: 9.5875
      This has the highest positive impact, so focusing on this tag would greatly improve conversion probability.
   2. Tags_Lost to EINS: 7.7425
      Leads with this tag also show a significant increase in conversion probability.
   3. Tags_Will revert after reading the email: 6.9136
      This variable also strongly contributes to improving conversion likelihood.

   Focusing on improving or managing above specific Tags categories - e.g., streamlining follow-ups, understanding reasons for these tags, or enhancing customer engagement - will help optimize lead conversion rates.

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.**

   Strategy for Aggressive Lead Conversion during Intern Period:
   - Use the Lead Score (0-100) as a primary filtering mechanism
   - Focus exclusively on leads with scores above 60 (high conversion probability)
   - Prioritize leads with:
     - Longer website visit times
     - Multiple website visits
     - Engagement from high-performing lead sources
   - Implement a rapid, personalized outreach approach for these top-scored leads
   - Train interns to use the predictive model as a key decision-making tool
   - Set up a structured follow-up process with multiple touchpoints for high-potential leads

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.**

   Strategy to Minimize Useless Phone Calls:
   a. Use the Priority Column for Filtering Leads:
      - Reserve phone calls for Very High and High Priority leads only.
      - Rely on automated emails/messages for Medium and Low Priority leads.
   b. Set Clear Thresholds:
      - Very High Priority: Immediate follow-up via phone calls.
      - High Priority: Limited calls, supplemented with automated communication.
      - Medium/Low Priority: Fully automated outreach.
   c. Optimize Resource Allocation:
      - Focus efforts on leads with the highest conversion probability and potential ROI.
   d. Develop a Triage System:
      - Categorize leads by Priority, Conversion Probability, and Revenue Potential to streamline communication efforts.

   Filter leads using the Priority column to focus phone calls where they matter most, minimizing effort on low-impact leads.