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

Top Three Variables Contributing Most to Lead Conversion
The logistic regression model identified the following top three variables based on their absolute coefficients:

Feature	***Coefficient***	***Absolute Coefficient***
Tags_Ringing	*-1.713483*	*1.713483*
Tags_Will revert after reading the email	*1.586093*	*1.586093*
Total Time Spent on ***Website***	*1.350468*	*1.350468*

Explanation:

- ***Tags_Ringing*** *negatively influences the probability of lead conversion. This suggests that leads marked with this tag are less likely to convert, and strategies should focus on improving engagement with these leads.*
- ***Tags_Will revert after reading the email*** *positively influences lead conversion. These leads are likely to convert, indicating that follow-up emails play a significant role in their decision-making.*
- ***Total Time Spent on Website*** *positively impacts conversion. The more time a lead spends on the website, the higher the probability of conversion, indicating a strong interest in the product or service.*

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?**

Top Three Categorical/Dummy Variables to Focus On
Among the categorical variables, the top three contributors are:

Feature	***Coefficient***	***Absolute Coefficient***
Tags_Ringing	*-1.713483*	*1.713483*
Tags_Will revert after reading the email	*1.586093*	*1.586093*
Tags_Lost to EINS	*0.932813*	*0.932813*

Explanation:

- ***Tags_Ringing*** *and* ***Tags_Will revert after reading the email*** *exhibit significant influence, as explained above.*
- ***Tags_Lost to EINS*** *indicates leads lost to competitors. Addressing the reasons behind these losses could improve 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

When X Education wants to aggressively convert leads during the intern hiring period, lowering the prediction threshold to ***0.3*** *results in targeting* ***1123 leads****.*

Suggested Strategy:

- ***Prioritize high-probability leads:*** *Focus on leads with higher predicted probabilities first to maximize efficiency.*
- ***Increase communication frequency:*** *Utilize multiple channels (emails, calls, SMS) to engage targeted leads actively.*
- ***Personalized follow-ups:*** *Leverage the insights from top contributing variables to craft personalized messages, especially for leads with tags like "Will revert after reading the email."*

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

When the company wants to minimize unnecessary phone calls, raising the prediction threshold to ***0.7*** *results in targeting* ***967 leads.***

Suggested Strategy:

- ***Focus on high-confidence leads:*** *Call only leads with predicted probabilities above 0.7 to ensure calls are directed towards leads most likely to convert.*
- ***Use email for others:*** *For lower-confidence leads, prioritize emails or other less resource-intensive communication methods.*
- ***Monitor call outcomes:*** *Evaluate the success of calls made during this phase to refine the strategy further.*