Subjective Questions

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

   Top three variables that contribute to the model are:
   1. Total Visits
   2. Total Time Spent on Website
   3. Lead Origin

   These three variables have the greatest positive impact on the likelihood of a lead being converted, as indicated by the logistic regression model. While other variables also play a role, their influence is smaller compared to these top three.

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 increase the probability of lead conversion, we should focus on these top 3 categorical variables:
   1. Lead Origin_Lead Add Form
   2. What is your current occupation_Working Professional
   3. Lead Source_Welingak Website

   These features have the largest positive impact on lead conversion in our model, so investing effort into optimizing these aspects could yield better 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.**

   The key to maximizing conversions during this aggressive period is to:

1. Decrease the probability threshold to include more potential leads (increase recall). (For example we are currently considering leads with 0.44 probability as potential leads, we can potentially decrease this number.)
2. Prioritize leads which have high conversion probability, focus first on leads that are most likely to convert.
3. Categorize the leads based on their characteristics (e.g., source, last activity, occupation) and focus more on personalized communication.
4. Divide the leads into different tiers, based on their likelihood to convert and prioritize contacting leads that have higher chance of conversion.
5. Monitor lead responses and adjust the strategy accordingly throughout the two-month period.

By combining these strategies, X Education can efficiently use their temporary resources (interns) to maximize lead conversion and meet their goals during the hiring phase.

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.**

To reduce unnecessary phone calls while still capturing potential conversions during this phase, X Education should:

- Raise the conversion probability threshold to focus only on leads with high predicted conversion probabilities (e.g., ≥ 0.8).
- Prioritize leads from high-impact sources and those with recent engagement (e.g., website visits, phone conversations).
- Filter leads based on key model insights, such as lead origin and last activity, to concentrate on those most likely to convert.
- Automate the process using CRM tools to flag high-priority leads and postpone follow-ups for lower-probability leads.
- Use alternative methods like email outreach for lower-priority leads to avoid wasting sales resources.

With this precision-driven approach, X Education can effectively reduce unnecessary calls while maintaining strong conversion rates from a smaller, highly qualified pool of leads.