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

    Ans 1: The top three variables based on the final model which contributes most towards the probability of lead getting converted are:
    - **Lead Source_Welingak Website: 5.39**
    - **Lead Source_Reference: 2.93**
    - **Current_occupation_Working Professional: 2.67**

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?

    Ans 2: The top three categorical/dummy variables in the model that should be prioritized to increase the likelihood of lead conversion are:
    - **Lead Source_Welingak Website: 5.39**
       - **Increasing investment in advertising and other promotional activities for the Welingak Website to attract more leads should be a priority.**
    - **Lead Source_Reference: 2.93**
       - **Offering incentives or discounts for references that convert into leads can encourage more referrals.**
    - **Current_occupation_Working Professional: 2.67**
       - **Engaging working professionals through targeted messaging and communication channels tailored to their preferences and impact on engagement is recommended.**

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.

    Ans 3: To enhance lead conversion during the intern-hiring period, X Education can adopt the following strategy based on the given variables and their coefficients:
    - **Focus on leads with high conversion potential: Leads from the following sources show higher likelihoods of conversion:**
       - **Welingak Website: 5.388662**
       - **Reference: 2.925326**
       - **Working Professional: 2.669665**

       Therefore, the sales team should prioritize contacting leads from these sources.
    - **Utilize effective communication channels: Leads who have received SMS messages and opened emails are more likely to convert. The coefficients for Last**

Activity_SMS Sent and Last Activity_Email Opened are 2.051879 and 0.942099, respectively. Thus, the sales team should prioritize contacting leads who have received SMS messages or opened emails.

- **Maximize website engagement: Total Time Spent on the Website indicates the lead's interest, with a coefficient of 1.049789. Therefore, the sales team should also prioritize contacting leads who have spent significant time on the website.**
- **Maintain a multi-channel approach: Additionally, it's crucial to follow up with leads who have interacted through multiple channels. For instance, leads who used the Olark Chat feature may not have spent much time on the website but could still be interested. Hence, the sales team should ensure follow-ups with leads using multiple interaction channels.**

In summary, X Education should focus on leads from high-potential sources, leverage effective communication channels, maximize website engagement, and maintain a multi-channel approach to intensify lead conversion efforts during the intern-hiring period.

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.

   Ans 4: To reduce the incidence of unnecessary phone calls after the company meets its quarterly sales target ahead of schedule, the sales team can implement the following strategy:

- **Emphasize lead nurturing efforts such as personalized emails, SMS messages, and targeted newsletters.**
- **Implement automated SMS campaigns for customers with a high likelihood of conversion.**
- **Collaborate with sales, management, and data science teams to refine models and solicit feedback on successful strategies.**
- **Develop strategies for offering discounts or incentives to encourage potential customers to take action.**
- **Strengthen relationships with potential customers through alternative communication channels like email, social media, or chatbots.**
- **Solicit feedback from current customers to enhance lead quality and optimize conversion rates.**