ASSIGNMENT SUBJECTIVE QUESTIONS

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

"Lead Source_Welingak Website", "Lead Source_Reference" and "What is your current occupation_Working Professional" and "Total time Spent on website" are the top variables contributed the most towards 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?

Based on the co-efficients obtained by the features in "result_7" model, "Lead Source_Welingak Website", "Lead Source_Reference" and " What is your current occupation_Working Professional" 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.

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.

Identify High-Value Leads:

a. Use the model to identify leads with a predicted probability close to 1 (i.e., those more likely to convert into customers). This can be determined using the logistic regression equation.

Prioritize Leads Based on Model Features:

- b. Focus on leads with characteristics that significantly contribute to a higher likelihood of conversion based on the model coefficients:
 - i. Leads who have not opted to receive emails (-1.7696)
 - ii. Leads spending more time on the website (1.1269)
 - iii. Leads from specific lead origins like 'Lead Source_Reference' (3.4987) or 'Lead Source Welingak Website' (6.1438)

- iv. Leads with certain last activities like 'Last Activity_Olark Chat Conversation' (-1.3775) or 'Last Activity_Unsubscribed' (1.5181)
- v. Leads with specific occupations like 'Working Professional' (2.5841)
- vi. Leads engaged in last notable activities such as 'Last Notable Activity_SMS Sent' (1.6722) or 'Last Notable Activity_Unreachable' (1.8093)

Segment and Personalize Phone Calls:

- c. Segment your calling list based on the identified high-value leads.
- d. Personalize phone call scripts and engagement strategies based on the lead's specific characteristics and behaviors as indicated by the model.

Use Automated Calling and CRM Tools:

- e. Implement automated calling systems or CRM tools that integrate with your model predictions.
- f. Automatically prioritize high-value leads for calling to ensure maximum coverage during the hiring phase.

Continuous Optimization and Feedback:

- g. Continuously monitor the effectiveness of your calling strategy based on model predictions.
- h. Gather feedback from the sales team and adjust the strategy based on observed conversion rates and lead responses.

Provide Interns with Targeted Training:

- i. Equip interns with targeted training on engaging and converting high-value leads identified by the model.
- j. Emphasize the importance of personalized communication and understanding customer needs based on predictive features.

By leveraging the insights from the logistic regression model and tailoring phone call strategy accordingly, X Education's sales team can maximize lead conversion rates during the critical intern hiring phase. This approach ensures efficient resource allocation and focuses efforts on the most promising leads for conversion.

- 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.
 - 1. Avoid focusing on jobless leads as they may not have the funds to pay for the course;
 - 2. Avoid focusing on students as they are already in school and would not be willing to enroll in a course intended specifically for working professionals at such an early stage of their careers.