## **Assignment-based Subjective Questions**

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

The top three variables in the logistic regression model that most significantly affect the probability of a lead getting converted at X Education are:

- 1. 'Lead Origin Lead Add Form,'
- 2. 'What is your current occupation\_Working Professional,' and
- 3. 'Lead Source\_Welingak Website.'

The coefficient values associated with these variables are highly positive, indicating that leads originating from a specifically added form, those who are working professionals, and leads sourced from the Welingak website have a higher propensity to complete a purchase. The model suggests that attention to the method by which leads are acquired, as well as the professional status of the lead, can yield a higher conversion rate.

## 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?

Among categorical variables, the model highlights the importance of the

- 1. 'Lead Origin,'
- 2. 'What is your current occupation,' and
- 3. 'Lead Source' as the most influential for lead conversion.

In particular, the categories within these variables—such as leads added through a form, leads who are identified as working professionals, and leads coming from the Welingak website—demonstrate a stronger likelihood of conversion. Focusing on these categorical variables could significantly improve the effectiveness of lead conversion strategies by targeting efforts towards the most promising segments.

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.

During the period when X Education employs interns and wishes to intensify lead conversion efforts, a multi-faceted approach is recommended.

Firstly, employing the predictive model to identify and score leads, the sales team should focus their calling efforts on leads with the highest scores, reflecting a high probability of conversion. This strategy ensures that resources are concentrated on potential customers most likely to enroll.

Secondly, calls should be strategically timed to coincide with periods when potential leads are more readily available, increasing the chances of successful contact. Lastly, the interns should be provided with tailored scripts that resonate with the identified influential factors, allowing for more personalized and effective communication.

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.

Conversely, when the company has met its quarterly targets and wishes to reduce unnecessary outreach, a more conservative approach is warranted.

The threshold for identifying 'hot leads' can be adjusted upwards, meaning only leads with a very high probability of conversion will be contacted. This ensures that the sales team's time is reserved for the most promising interactions, allowing them to focus on new tasks.

During this period, the company should leverage customer segmentation and automated marketing tools, particularly for leads with lower scores. This approach helps maintain engagement with these leads through less resource-intensive methods, such as targeted emails, allowing the sales team to direct their attention toward other strategic initiatives or high-value tasks.