Subjective Questions

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

Ans. The top three variables in our model which contribute most towards the probability of a lead getting converted are:-

- **Tags:** Showing a positive contribution towards the probability of a lead getting converted. Tags_Lost to EINS shows the highest positive contibution and Tags_Closed by Horizzon, Tags_Will revert after reading the email etc.
- **Lead Source:** Shows a positive contribution Lead Source_Welingak Website shows a codfficeint of 5.11 towards the probability of lead getting converted.
- **Last Notable Activity:** Shows a positive contribution. Last Notable Activity_SMS sent shows positive contribution with coefficient of 2.67 which means if the lead's last activity is of company sending message to the lead, then probability of lead getting converted increases.

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. 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 are:-

- **Tags_Lost to EINS** shows a coefficient of +8.98 for the probability of lead conversion.
- **Tags_Lost to Horizzion** shows a coefficient of +8.74 for probability of lead conversion.
- **Lead Source_Welingak Website** shows a coefficient of +5.11 for 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.

Ans: For cases where the conversion of potential leads is needed, the success rate is to be as maximum as possible, the model needs to be trained in a way that predicted values result in minimal range of false positives.

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: For cases where calls need to be made for extremely successful lead conversion, we can modify the model's probability threshold in such a way to get the maximum accuracy.

In this case study, the probability threshold of **0.75** gives the accuracy of **91.9%**