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 model which contribute most towards the probability of a lead getting converted are:

   - **Total Time Spent on Website: Has the strongest positive impact on lead conversion. Leads that spend more time on the website are more likely to convert, highlighting the importance of website engagement.**
   - **Lead Origin_Lead Add Form: Shows a strong positive influence. Leads generated through forms added to the website have a higher chance of conversion.**
   - **What is your Current Occupation_Working Professional- Is a significant positive predictor. Working professionals tend to have a higher probability of converting into paying customers.**

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:

   - **Total Time Spent on Website: Has the strongest positive impact on lead conversion. Leads that spend more time on the website are more likely to convert, highlighting the importance of website engagement.**
   - **What is your Current Occupation_Working Professional- Is a significant positive predictor. Working professionals tend to have a higher probability of converting into paying customers.**
   - **Last Notable Activity_Unreachable: Initially these leads might be unreachable, however these leads may still show interest and have potential for conversion with consistent follow-up.**

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 In situations where the company aims to aggressively convert as many leads as
   possible, the sales team should focus on leads with a high probability of conversion

(predicted as 1 by the model). A good strategy would be to:

- **Focus on leads predicted as 1 by the model, indicating a higher likelihood of conversion. These leads should be the first priority for phone calls.**

- **Rank leads based on indicators such as time spent on the website, browsing behavior, and engagement with the company. Working professionals and those showing high engagement are more likely to convert.**

- **Re-engage leads marked as "Unreachable" in previous attempts. Their past interest suggests conversion potential, so use a consistent follow-up strategy.**
- **Assign interns to focus on high-potential leads. Train them to make quick, effective calls, prioritizing leads from forms or website activities.**
- **Implement a strategy where interns immediately follow up with leads showing interest through recent website visits or form submissions, increasing the chances of conversion.**
- **The final prediction uses an optimal cutoff of 0.44. To be more aggressive, the company should reach out to all leads predicted as 1, even if their conversion probability falls below the 0.44 cutoff**

	Converted	Conversion_Prob	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	final_predicted
0	0	0.201403	0	1	1	1	0	0	0	0	0	0	0	0
1	0	0.764373	1	1	1	1	1	1	1	1	1	0	0	1
2	0	0.309071	0	1	1	1	1	0	0	0	0	0	0	0
3	1	0.201403	0	1	1	1	0	0	0	0	0	0	0	0
4	1	0.203428	0	1	1	1	0	0	0	0	0	0	0	0

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 In situations where the company's target is met and it wants to minimize unnecessary phone calls, the focus should shift towards leads with a lower probability of conversion. A good strategy would be:

- **Make phone calls exclusively to leads with strong conversion indicators, such as high website engagement or working professionals, and avoid those with lower conversion potential, like leads from direct traffic or those marked "Do Not Email."**
- **Use emails, SMS, or other digital channels for lower probability leads to reduce unnecessary phone calls. Only engage by phone if necessary.**
- **Assign interns to focus on digital engagement tasks for leads that are less likely to convert based on the model's predictions, and only engage by phone when necessary, such as monitoring email responses or sending personalized digital follow-ups instead of making phone calls**