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

Top three variables are:

- **Lead Source**-It is an important feature to focus on. Like Google and Direct traffic generate the highest number of leads, Reference leads have a high conversion rate(as we infer from data analysis of leads dataset).All its variables showing positive coefficient so it contribute more for lead conversion.
- **Total Time Spent on Website**- This feature has the great effect on lead conversion. Increased time spent on the website suggests that leads are more engaged and interested, which increase the chances of conversion.
- **TotalVisits:** More visits typically indicate higher engagement, which can lead to increased conversions.

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?

Top 3 categorical/dummy variables are:

- **Lead Source_Welingak Website:** With coefficient 5.54 this variable is the top contribut or in order to increase the probability of lead conversion. This variable has a strong impa ct on conversions, suggesting that focusing on leads from this will likely lead to better results.
- **Lead Source_Reference:** With a coefficient of 3.11, this variable significantly influences the lead conversion rate. , suggesting that focusing on leads from this variable will likely
- lead to better results.
- **What is your current occupation_Working Professional** :With a coefficient of 2.35, this variable significantly influences the lead conversion rate, suggesting that focusing on leads from this variable will likely lead to better results.
- **What is your current occupation_Not provided** and **Do Not Email** has highest negetive coefficient -1.16 and -1.56 respectively , which indicates leads coming under this categories has lowest probability of 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.

During the intern hiring period, when X Education aims to actively convert leads, the following   strategy should be implemented:

- The company should prioritize calling leads from "Welingak Websites" and "Reference" sources, as these are more likely to convert.
- The company should focus on calling leads who are "working professionals" as they have a higher likelihood of converting.

- The company should prioritize contacting leads from the "Olark Chat" source, as these leads are more likely to convert.
- The company should focus on leads whose last activity was an "SMS sent", as they are more likely to convert.
- The company should deprioritize calling leads who selected "Do not Email" as they are unlikely to convert.
- The company deprioritize leads whose origin is "Landing Page Submission," as they are unlikely to convert.

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.**
   - Limit calls to high-priority leads: Focus only on those who have shown strong engagement. Use "Total Time Spent on the Website" and "Total Visits" to identify the leads most likely to convert.
   - The company should refrain from calling leads who selected "Do not Email" as they are unlikely to convert.
   - The company deprioritize calling leads whose origin is "Landing Page Submission" as they are unlikely to convert.
   - The company should not make calls to the leads whose last activity was "Olark Chat Conversation" as they are not likely to get converted.

   By targeting high-probability leads and reducing unnecessary calls, the sales team can use their resources more effectively while still engaging with leads.