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

   Solution:
   The Top Three variables in our Model which contributes the most towards the conversion of leads
   a. **Lead origin**
   b. **Last Notable Activity**
   c. **Lead Source**

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?**

   Solution:
   The Top Three categorical variables should be focused most inorder to increase the probability are
   - **Lead_Origin_lead add form** with a coefficient of 2.9471
   - **Last_Notable_Activity_had a phone conversation** with a coefficient of 2.8195
   - **Lead_Source_welingak website** with a coefficient of 2.6447

3. **X Education has a period of 2 months every year during which they hire some interns. The sales team 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.**

   Solution:
   Below is the chart shows probability cutoff's and projected leads as per the model built.
   We can see from the below chart, when the probability cutoff is low there are high number of leads, hence we can say that probability cutoff is inversely proportional to leads.

	Probability Cut-Off	Projected Leads
0	0.05	8691.0
1	0.10	6694.0
2	0.15	5210.0
3	0.20	4801.0
4	0.25	4651.0
5	0.30	4527.0
6	0.35	3974.0
7	0.40	3578.0
8	0.45	3222.0
9	0.50	2933.0
10	0.55	2735.0
11	0.60	2571.0
12	0.65	2382.0
13	0.70	2225.0
14	0.75	1974.0
15	0.80	1743.0
16	0.85	1468.0
17	0.90	1180.0
18	0.95	805.0

A period of 2 months every year during which X education hire some interns and during this page, they wish to make the lead conversion more aggressive and want almost all the potential leads to be converted, hence to make this we can lower the cutoff further. Let's say we can reduce the cutoff to 0.30 to 0.35 where the number of leads is 4527 to 3974(0.35 cut-off) whereas with 0.45 we have number of leads is 3222.

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.**

Solution:

Below is the chart shows probability cutoff's and projected leads as per the model built.

We can see from the below chart, when the probability cutoff is low there are high number of leads, hence we can say that probability cutoff is inversely proportional to leads.

	Probability Cut-Off	Projected Leads
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17	0.90	1180.0
18	0.95	805.0

Once the company reaches its target for the quarter before the deadline and during this time, the company wants the sales team to focus on the other new work as week. Also, during this time company's aim is not to make any phone calls unless its extremely necessary. To achieve this, we need to minimize the phone calls during this time, we can raise the cut-off value higher than 0.45 to target less customer but with high conversion rate. We will set the cut-off value around 0.85 to 0.90 with projected leads as 1468 to 1180 (0.85 cutoff), as the precision is high, we are contacting the high chances of conversion and will achieve the aim to avoid phone calls.