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

- Based on the coefficient values from below screeshot, the following are the top three variables that contribute most towards the probability of a lead getting converted :
  a) LeadOrigin_Lead Add Form
  b) CurrentOccupation_Working Professional
  c) LeadSource_Welingak Website

	coef
const	-0.4094
Total Time Spent on Website	0.9556
LeadOrigin_Lead Add Form	2.8630
LeadSource_Direct Traffic	-0.7141
LeadSource_Organic Search	-0.5349
LeadSource_Welingak Website	2.0351
LastActivity_Email Bounced	-1.2588
LastActivity_SMS Sent	1.2210
CurrentOccupation_Info not available	-1.1752
CurrentOccupation_Working Professional	2.3064
LastNotableActivity_Modified	-0.9643

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?**

- Again, based on the coefficient values from the screen shot in the question above, the following are the top three categorical/dummy variables that should be focused the most in order to increase the probability of lead conversion :
  a) Lead Add Form (from Lead Origin)
  b) Working Professional (from What is your current occupation)
  c) Welingak Website (from Lead Source)

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.

- In the below image, the final prediction is calculated based on an optimal cut off value of 0.37.
- In order to make the sales aggressive, the company may contact all the leads which have a conversion probabilty (value = 1) under a cut off 0.3 (highlighted in yellow).

	Converted	Converted_prob	Prospect ID	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	final_Predicted	Lead_Score
0	0	0.059272	5493	0	1	0	0	0	0	0	0	0	0	0	0	6
1	0	0.059077	8064	0	1	0	0	0	0	0	0	0	0	0	0	6
2	0	0.090029	4716	0	1	0	0	0	0	0	0	0	0	0	0	9
3	0	0.221927	9117	0	1	1	1	0	0	0	0	0	0	0	0	22
4	1	0.565647	2402	1	1	1	1	1	1	1	0	0	0	0	1	57
5	0	0.032485	1796	0	1	0	0	0	0	0	0	0	0	0	0	3
6	0	0.032485	1120	0	1	0	0	0	0	0	0	0	0	0	0	3
7	0	0.101822	253	0	1	1	0	0	0	0	0	0	0	0	0	10
8	0	0.085483	1491	0	1	0	0	0	0	0	0	0	0	0	0	9
9	1	0.366402	2004	0	1	1	1	1	0	0	0	0	0	0	1	37
10	0	0.270317	1792	0	1	1	1	0	0	0	0	0	0	0	0	27
11	0	0.098079	1944	0	1	0	0	0	0	0	0	0	0	0	0	10
12	0	0.031389	3879	0	1	0	0	0	0	0	0	0	0	0	0	3
13	0	0.208535	4084	0	1	1	1	0	0	0	0	0	0	0	0	21

Another way would be to focus on

1. Leads sources through Add forms
2. Working professionsals
3. Leads sources through Wellingak Website

and following up with them routinely to make sure these leads are converted.

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.**

- In order to minimize the rate of useless phone calls, the company may contact through email, all the leads which have a conversion probabilty (value = 1 highlighted in yellow color) under column 0.6. However, the flipside here would be that, we may miss out on those leads that are actually converted but then the model wrongly predicted them as

not converted. (See red highlights in the image below). This should not be a major cause for concern as the target has already be achieved.

	Converted	Converted_prob	Prospect ID	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	final_Predicted	Lead_Score
0	0	0.059272	5493	0	1	0	0	0	0	0	0	0	0	0	0	6
1	0	0.059077	8064	0	1	0	0	0	0	0	0	0	0	0	0	6
2	0	0.090029	4716	0	1	0	0	0	0	0	0	0	0	0	0	9
3	0	0.221927	9117	0	1	1	1	0	0	0	0	0	0	0	0	22
4	1	0.565647	2402	1	1	1	1	1	1	1	0	0	0	0	1	57
5	0	0.032485	1796	0	1	0	0	0	0	0	0	0	0	0	0	3
6	0	0.032485	1120	0	1	0	0	0	0	0	0	0	0	0	0	3
7	0	0.101822	253	0	1	1	0	0	0	0	0	0	0	0	0	10
8	0	0.085483	1491	0	1	0	0	0	0	0	0	0	0	0	0	9
9	1	0.366402	2004	0	1	1	1	1	0	0	0	0	0	0	1	37
10	0	0.270317	1792	0	1	1	1	0	0	0	0	0	0	0	0	27
11	0	0.098079	1944	0	1	0	0	0	0	0	0	0	0	0	0	10
12	0	0.031389	3879	0	1	0	0	0	0	0	0	0	0	0	0	3
13	0	0.208535	4084	0	1	1	1	0	0	0	0	0	0	0	0	21