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

   Solution:

   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) Total Time Spent on Website
   b) Lead Add Form (from Lead Origin)
   c) Current Occupation Working professional

	coef
const	-1.0452
TotalVisits	-0.5008
Total Time Spent on Website	3.9291
Lead Origin_Lead Add Form	3.5824
Lead Source_Welingak Website	2.3440
Do Not Email_Yes	-1.5320
Last Activity_Converted to Lead	-1.0795
Last Activity_Email Bounced	-1.1221
Last Activity_Olark Chat Conversation	-0.9032
Last Activity_Unreachable	-0.9437
What is your current occupation_Other	1.6250
What is your current occupation_Unemployed	0.8625
What is your current occupation_Working Professional	3.3232

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:

   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) Current Occupation Working professional

c) Lead Source_Welingak Website

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.

   Solution:

   In the below image, the final prediction is calculated based on a optimal cut off value of 0.35.

   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 (column 0.3 highlighted in yellow).

	Converted	Conversion_Prob	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	0	0.172709	0	1	1	0	0	0	0	0	0	0	0
1	1	0.996807	1	1	1	1	1	1	1	1	1	1	1
2	1	0.514807	1	1	1	1	1	1	1	0	0	0	0
3	0	0.088521	0	1	0	0	0	0	0	0	0	0	0
4	0	0.195017	0	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.

   Solution:

   In order to minimize the rate of useless phone calls, the company may contact all the leads which have a conversion probabilty (value = 1) under column 0.7.

	Converted	Conversion_Prob	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	0	0.172709	0	1	1	0	0	0	0	0	0	0	0
1	1	0.996807	1	1	1	1	1	1	1	1	1	1	1
2	1	0.514807	1	1	1	1	1	1	1	0	0	0	0
3	0	0.088521	0	1	0	0	0	0	0	0	0	0	0
4	0	0.195017	0	1	1	0	0	0	0	0	0	0	0