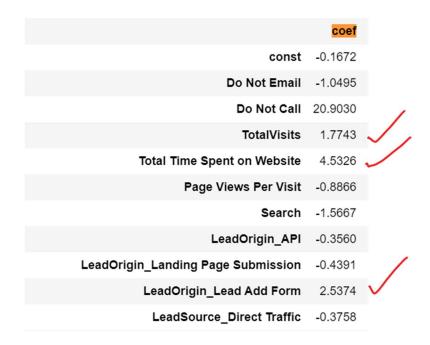1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

   After running RFE algorithm to the dataset that has been split into test and train during the model building stage, the top three variables which are contributing towards the probability of a lead getting converting are:
   1. Total Time Spent on Website
   2. LeadOrigin_Lead Add Form
   3. Total Visits

	coef
const	-0.1672
Do Not Email	-1.0495
Do Not Call	20.9030
TotalVisits	1.7743
Total Time Spent on Website	4.5326
Page Views Per Visit	-0.8866
Search	-1.5667
LeadOrigin_API	-0.3560
LeadOrigin_Landing Page Submission	-0.4391
LeadOrigin_Lead Add Form	2.5374
LeadSource_Direct Traffic	-0.3758

   The above analysis is derived based on the coefficient value obtained by generalizing the linear model regression. As per the goals of the model higher score would mean that the lead is hot, i.e. is most likely to convert and thus variable with higher coefficients are shown from the above screeshotn which are marked .

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?

   The following are the top three categorical/dummy variables that should be focused the most in order to increase the probability of lead conversion :
   1. Lead Add Form
   2. Had a Phone Conversation
   3. LeadSource_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.

   Phone calls should be made to target people:
   - Those who are spending a lot of time on the website, which can be accomplished by making the website interesting and enticing them to return.
   - Those who is seen returning to the website on a regular basis?
   - Those who did most recent activity was via SMS or an Olark chat conversation
   - Working professionals

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.

   - The strategy is to reduce the number of unnecessary phone calls, the company may contact all leads with a conversion probability (value = 1). On the other hand, we may miss out on leads that are actually converted but were incorrectly predicted as not converted by the model. This should not be a major source of concern because the goal has already been met.
   - This will ensure the Specificity rating is very high, which in turn will make sure almost all leads who are on the edge of the probability of getting Converted or not are not selected.

   Other methods, such as automated emails and SMS, could be tried by the company. This strategy can be used but with the customers that have a very high chance of buying the course. Hence can avoid calling unless absolutely necessary.