

## Assignment Subjective Questions:

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

**Answer:** Based on the coefficient values below, the top three variables that most significantly contribute to the probability of a lead getting converted are:

- a. Total Time Spent on Website
- b. Total Visits
- c. Working Professional (from the "What is your current occupation" category)

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1 #Printing the parameters and the coefficients
2 res.params
```

const	-1.087808
Lead Origin_Lead Add Form	2.188463
Lead Source_Welingak Website	2.119606
Last Activity_Converted to Lead	-1.004058
Last Activity_Email Bounced	-0.969777
Last Activity_Had a Phone Conversation	2.168526
Last Activity_Olark Chat Conversation	-1.080691
Last Activity_SMS Sent	0.596522
Country_Not Shared	1.464454
Specialization_Not Shared	-0.267279
What is your current occupation_Working Professional	2.438455
What matters most to you in choosing a course_Not Shared	-1.172651
Last Notable Activity_Email Link Clicked	-1.198235
Last Notable Activity_Email Opened	-0.732885
Last Notable Activity_Modified	-1.172519
Last Notable Activity_Olark Chat Conversation	-0.816076
Last Notable Activity_Page Visited on Website	-1.310046
Last Notable Activity_Unreachable	1.107337
Do Not Email	-1.528925
TotalVisits	2.893144
Total Time Spent on Website	4.652496
Page Views Per Visit	-1.781743
dtype: float64	

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?

**Answer:** The following are the top three categorical/dummy variables that should be focused on the most to increase the probability of lead conversion:

- a. Working Professional (from the "What is your current occupation" category)
- b. Had a Phone Conversation (from the "Last Activity" category)
- c. Lead Add Form (from the "Lead Origin" category)

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```

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Last Activity_Converted to Lead       -1.004058
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What is your current occupation_Working Professional  2.438455
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Last Notable Activity_Unreachable       1.107337
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Total Time Spent on Website             4.652496
Page Views Per Visit                   -1.781743
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```

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.

**Answer:** We can use the selected features to decide whom phone calls should be made. Calls should be made to people who:

- a. Spend a lot of time on the website and visit it frequently. We can increase the conversion rate for these leads by making the website more user-friendly and attractive.
- b. Are working professionals.
- c. Have a lead source from the 'Welingak Website'.

These leads have a higher probability of conversion.

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.

**Answer:** During this time, they can send automatic emails and SMS.

This strategy should target leads with a high chance of conversion, such as working professionals or those who spend more time on the website and visit it frequently. However, they should exclude leads whose last activity is "Modified," "Email Link Clicked," or "Email Bounced."