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

   Answer: Top three variables contributing to lead's probability of conversion are:
   a) Lead's Source – If Welingak Website and Reference, contributes positively.
   b) Last Activity of customer being a phone conversation contributes positively.
   c) Do not Email – if set, contributes negatively.
   .

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: a) More traffic needs to be obtained from Welingak
   b) Leads source via Reference should be increased
   c) More phone conversations should be made with leads

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: The model built has correctly predicted potential leads for 1506 times out of 2253 times and missed out on 747(False Negatives) times by wrongly predicting potential lead as otherwise. Since during the new recruit period, there is an availability of capacity to handle more nurturing work, we must ensure to keep False Negatives at minimum so that there are no wrong classifications for a potential lead. This would lead to all potential leads being correctly predicted as potential leads by the model, thereby **increasing the sensitivity**. The way to increase sensitivity of prediction model is to keep a lower cut-off of probability for a lead to be classified as potential one. Hence the strategy is to form predictions based on low cut-off.

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: The model built has correctly predicted non-potential leads for 3242 times out of 3706 times and missed out on 464(False Positives) times by wrongly predicting non-potential leads as potential. Since during quarter deadline period, there is no capacity to handle extra calls, we must ensure to keep False Positives at minimum so that unnecessary calls are not made to non-potential customers. This should lead to all non-

potential leads being correctly classified as non-potential and **therefore high specificity**. The way to achieve this to choose a high cut-off for the model so that no zeros are wrongly predicted as ones that would cause unnecessary work efforts.