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

   Top three variables in the model are
   - Lead source
   - Occupation
   - Last origin

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?
   - Lead sources from "Welingak Websites"
   - Lead Origin from "Lead Add Form"
   - Leads who are "working professionals".

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.

   Sensitivity with respect to the model can be defined as the ratio of total number of actual conversions correctly predicted to the total no of actual conversions. For a particular model, as Sensitivity increases, Specificity decreases and vice versa. Different values of the sensitivity and specificity can be achieved for the same model by changing the Conversion Probability cutoff threshold value.

   When the probability thresholds are very low, the sensitivity is very high, and specificity is very low. High sensitivity implies that the model will correctly identify almost all leads who are likely to convert. It will do that by over-estimating the Conversion likelihood, i.e., it will misclassify some non-conversion cases as conversions.

   Since X Education has more manpower for 2 months and they wish to make the lead conversion more aggressive by wanting almost all the potential leads, we can choose a lower threshold value for Conversion Probability. This will ensure the Sensitivity rating is very high which in turn will make sure almost all leads who are likely to convert are identified correctly and the agents can make phone calls to as much of such people as possible.

   The following leads must be contacted if:
   - They are working professionals
   - They visit and spend considerable amount of time on the website

- Lead source is either Welingak website or References or Olark Chat conversation
- Lead origin is "Add Form"

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.

   To minimize the rate of useless phone calls, the company can
   - Choose a higher threshold value for Conversion Probability. This ensures that all the leads contacted have high a conversion probability.
   - Call or send automated emails and SMS to target leads with high conversion probability (Hot leads)