# Assignment Subjective Questions - Lead Scoring Case Study

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

Based on the logistic regression model in Upgrad\_Case\_Study, the top three variables contributing to lead conversion are:

1. **Total Time Spent on Website** – This is the most influential factor in predicting conversion. Leads who spend more time exploring course details, watching videos, or reading content demonstrate strong interest and intent, making them more likely to convert.
   * Recommendation: Enhance website engagement through interactive course previews and personalized recommendations.
2. **Lead Source - Google/Search Engine** – Leads originating from organic search tend to have strong purchase intent as they are actively searching for educational solutions.
   * Recommendation: Invest more in SEO optimization and paid search marketing to attract high-intent users.
3. **Last Activity - Email Opened** – Leads who engage with email campaigns (especially opening emails multiple times) show increased likelihood of conversion.
   * Recommendation: Optimize email subject lines and content, and implement automated follow-up sequences.

**2. What are the top three categorical/dummy variables in the model that should be focused on to increase lead conversion probability?**

1. **Lead Origin - Landing Page Submission** – Leads who voluntarily submit their details through landing pages have already shown interest, making them highly valuable for conversion.
   * Strategy: Optimize landing pages with clear CTAs (Call-To-Actions), compelling course details, and testimonials to increase lead quality.
2. **Lead Source - Reference** – Referral-based leads often convert at higher rates as they come with trust and credibility from previous customers.
   * Strategy: Strengthen referral programs and encourage existing customers to refer new leads with incentives.
3. **Last Notable Activity - SMS Sent** – Leads who receive SMS reminders or promotions show better engagement and conversion rates.
   * Strategy: Use personalized SMS follow-ups as a secondary touchpoint after email outreach.

**3. Strategy for aggressive lead conversion during the internship period (maximizing conversions):**

During the 2-month internship period, the company wants to convert as many high-potential leads as possible. The strategy should focus on **rapid outreach, frequent follow-ups, and personalized engagement**.

* **Prioritize leads with high lead scores (>80).**
  + Interns should focus their efforts on this segment to maximize conversions.
* **Increase frequency of follow-ups** via phone calls, emails, and SMS.
  + Use an automated system to schedule reminders for interns.
* **Segment leads based on activity levels**:
  + **Highly Engaged Leads** (Website Time >5 mins, Email Opened, Watched Course Video) → **Immediate call within 24 hours**.
  + **Moderately Engaged Leads** (Clicked on Ad, Submitted Form) → **Follow-up call in 48 hours**.
  + **Low Engagement Leads** (Minimal interaction) → **Drip marketing campaigns (email/SMS) instead of calls**.
* **Offer time-sensitive discounts or exclusive offers**:
  + Highlight limited-time enrolment offers to drive urgency.
* **Optimize calling times** based on past engagement patterns:
  + Schedule calls when leads are most active (historically, business hours perform best).

**4. Strategy for minimizing unnecessary calls when targets are met (focusing only on necessary calls):**

When the company reaches its quarterly target, the focus shifts to reducing unnecessary calls and optimizing efforts for only high-priority leads.

* **Apply a stricter cutoff score (e.g., only call leads with scores >90).**
  + Use predictive lead scoring to ensure that only the most valuable leads receive direct outreach.
* **Use automation (emails & SMS) instead of direct calls**:
  + Medium-scoring leads (70-89) should be engaged through automated email and SMS sequences.
  + This reduces workload while maintaining lead engagement.
* **Engage only with leads who have recently interacted**:
  + If a lead has not opened an email or clicked a link in the last 7 days, deprioritize them from call lists.
* **Leverage digital retargeting ads**:
  + Instead of calling lower-priority leads, use remarketing ads on social media and search engines to re-engage them passively.
* **Assign interns to focus on data analysis & pipeline optimization**:
  + Instead of making unnecessary calls, interns can analyze lead behavior trends and refine the scoring model for future efficiency.