## 1. Top Three Most Important Variables in Lead Conversion

To identify the most influential features, I'll use the **feature importance** from **Logistic Regression coefficients** or a **Random Forest model**. Typically, the key predictors are:

- 1. **Total Time Spent on Website** Leads who spend more time exploring the platform are more likely to convert.
- 2. **Lead Source** Certain lead sources (e.g., referrals, direct traffic) may yield higher conversion rates.
- 3. **Last Activity** Actions like responding to emails or calling back indicate high engagement.

I can confirm these with an importance ranking from the model.

## 2. Top Three Most Important Categorical Variables to Focus On

- 1. **Lead Origin** Leads from sources like Google Search or Landing Page submissions tend to convert better.
- 2. **Specialization** Certain professional backgrounds show a higher interest in online courses.
- 3. **Last Notable Activity** Email responses, call backs, and interactions predict conversion likelihood.

Focusing marketing and sales efforts on optimizing these categories (e.g., tailoring campaigns by specialization) can improve conversion rates.

## 3. Strategy for Aggressive Lead Conversion (Intern Hiring Period)

Since X Education wants to maximize conversions, the sales team should:

- ✓ Increase call frequency for all leads predicted as 1 (potential conversions).
- Prioritize hot leads based on lead score (e.g., those with high time spent on the site).
- Automate reminders (emails, WhatsApp, SMS follow-ups) for leads not responding.
- ✓ **Use interns for first-level filtering**, so experienced sales reps focus on the strongest leads.

## 4. Strategy to Minimize Calls (Quarterly Target Achieved)

To reduce unnecessary calls while still capturing key leads:

- Increase the lead score threshold (only contact the highest probability leads).
- Use email nurturing instead of calls Automate follow-up emails for lower-priority leads.
- Segment leads by urgency Only call those who showed strong buying signals (e.g.,

watched multiple videos).

• Redirect sales efforts – Use the free time for gathering insights, refining strategies, and testing new acquisition channels.