

## **APPROACH FOR AV-CONTEST**

### **STEPS:**

1. Importing both train and test data.
2. Checking null values and imputing with new class 'no\_card' instead of 'nan' in CREDIT\_PRODUCT.
3. Separating categorical and numerical columns.
4. Checking any new region code in test data.
5. EDA--- Distribution plot for numerical values to check any possibility to change to normal –Log transformation for 'Avg\_Account\_Balance'.
6. EDA----Boxplot for checking outliers in numerical data with respect to 'Is\_Lead'.
7. EDA—Categorical count plot for all classes with respect to Is\_Lead .
8. Problem interpreted as Imbalance classification model.
9. Label encoding categorical data for both train and test.
- 10.Applying first catboost model for with just label encoding.
- 11.One-hot coding on categorical data.
- 12.Selecting categorical features using chi2 feature selection method with threshold 500.
- 13.Applying second catboost model with selected categorical and all other numerical columns ( This model gave best ).
- 14.Predicting test data.