

# Problem Statement – Practice Project

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## General Instructions:

1. A LMN medical insurance company wants to predict their customers who are going to do renewal in next year, and want you to develop a model with proper EDA to get some recommendation. Below are the steps (question) which you have to follow to create a predictive model.
2. You have to write SAS code to get the answer of the below question.

### Question 1:

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| 1. | Import dataset in the SAS environment and check top 5 record of import dataset (2 Mark) |
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### Question 2:

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| 2. | Check data type and dimension of the import dataset (2 Mark) |
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### Question 3:

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| 3. | Check for outlier, if yes then do treatment? (4 Mark) |
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### Question 4:

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| 4. | Checks if any variables have missing values, if yes then do treatment? (4 Mark) |
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### Question 5:

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| 5. | Check percentile distribution summary of all numerical variables? (6 Marks) |
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### Question 6:

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| 6. | Calculate percentage contribution of each class in respective class variables? (6 Marks) |
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### Question 7:

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| 7. | For Xsell purpose sales team wants you to build a macro where they will put the policy number and they will get mobile number and existing premium amount (6 Marks) |
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### Question 8:

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| 8. | Check correlation of all numerical variables to avoid correlated variables in model? (6 Marks) |
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### Question 9:

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| 9. | Create train and test (70:30) dataset from the existing data set. Put seed 1234? (4 Marks) |
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### Question 11:

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| 11. | Create basic logistic model only on numeric variable (no tuning required) for target variables? (3.5 Marks) |
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### Question 12:

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| 10. | Predict test dataset using created model? (3.5 Marks) |
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**Question 13:**

10.	Select 0.20 probability as a cutoff and create binary predicted variable. Create confusion matrix on the calculated variable and target variable? (3 Marks)
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