



# EDA CASE STUDY

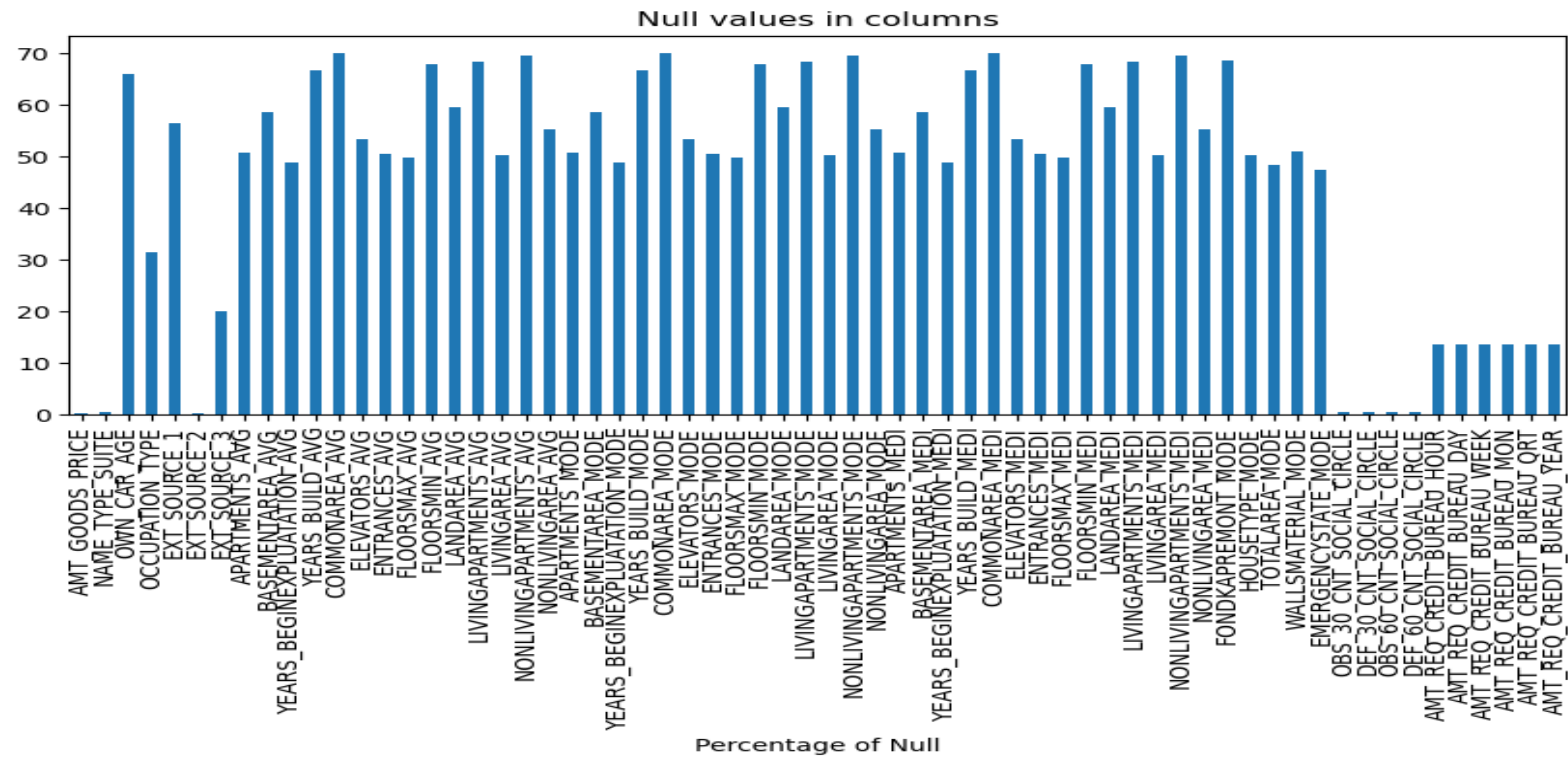
Submitted by  
Gourav Bhattacharjee

# About case study:

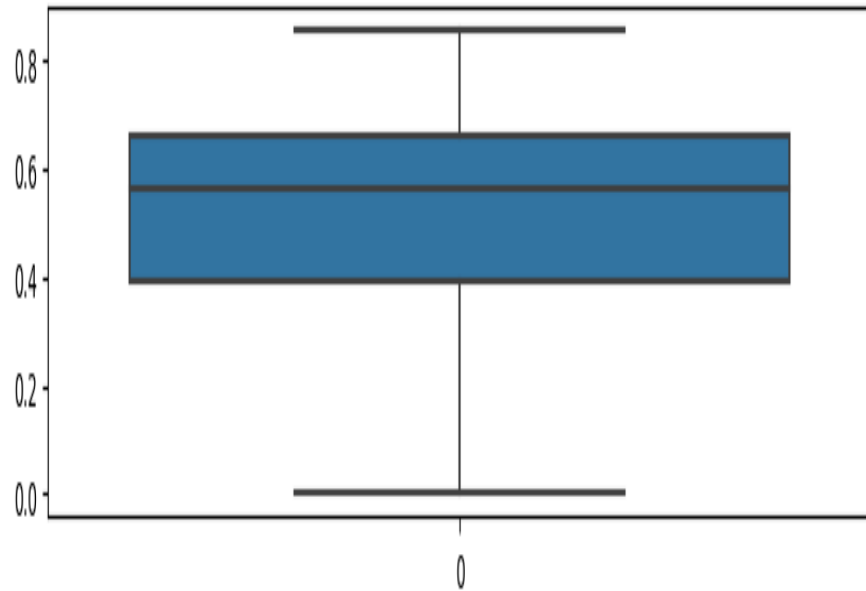
- ▶ Basic understanding of risk analytics in banking and financial service and how data is used to minimize the risk of losing money while lending to customer.

# Steps:

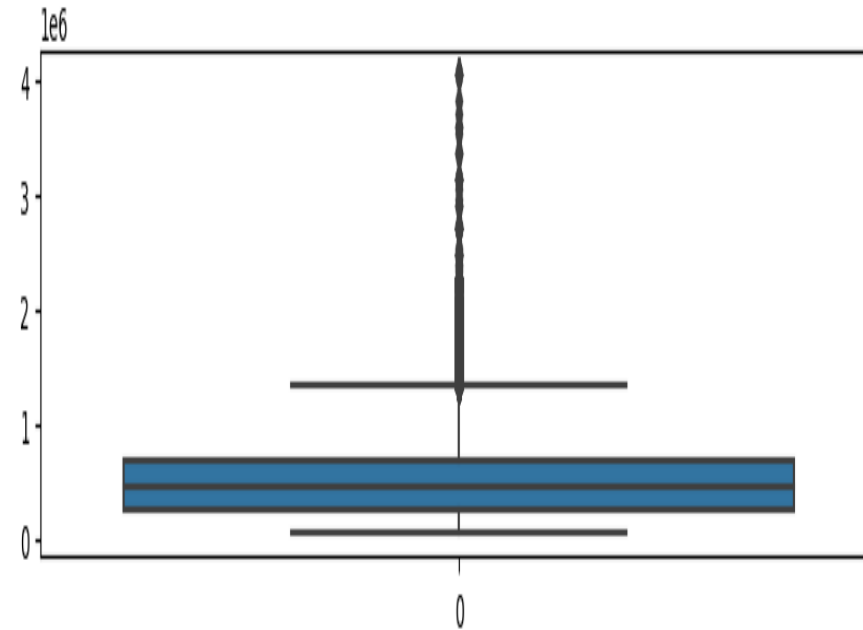
Visualizing Null values of columns in graph :



## EXT\_SOURCE\_2



## AMT\_GOODS\_PRICE

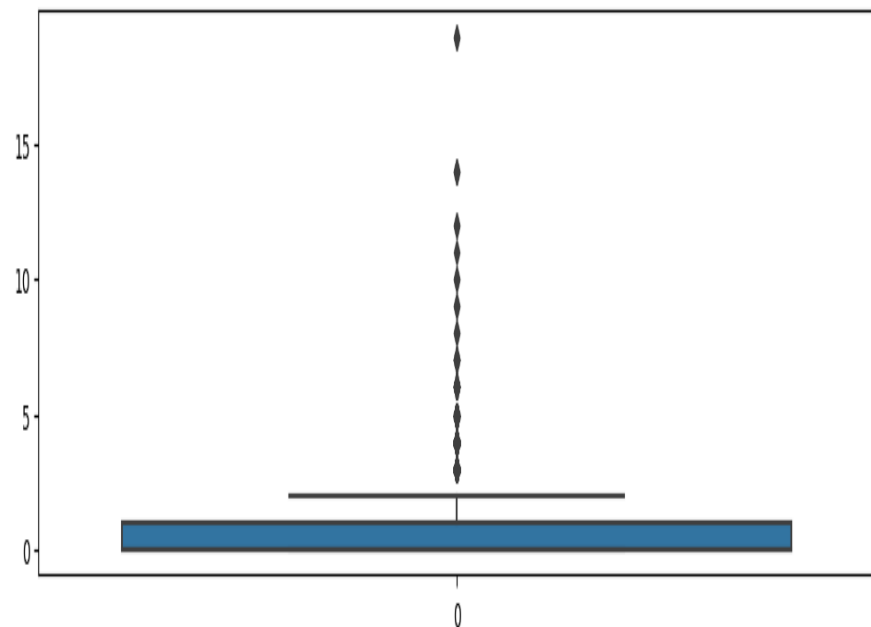


### From Boxplots:

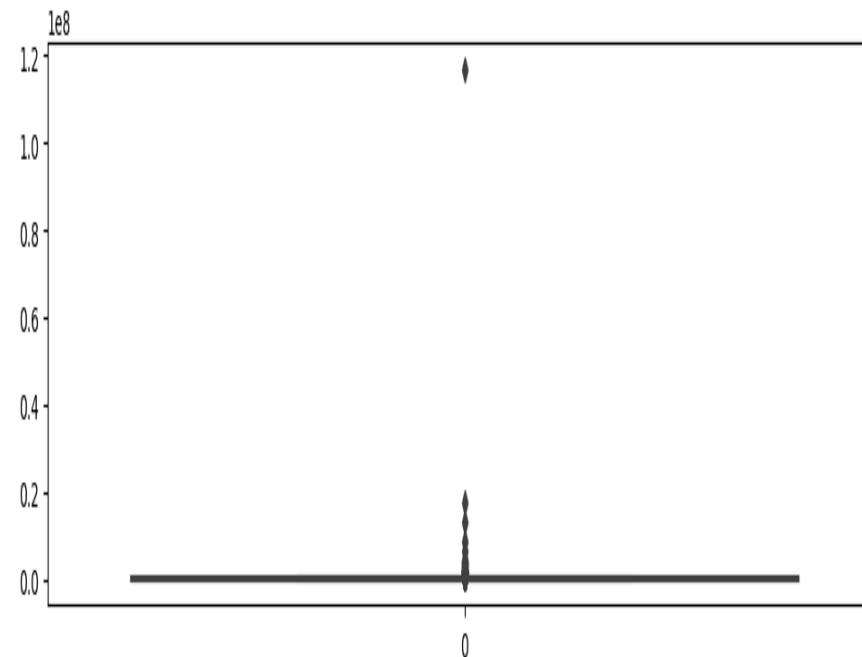
- ✓ For 'EXT\_SOURCE\_2' no outlier present. So, the data is rightly present.
- ✓ For 'AMT\_GOODS\_PRICE' outlier present in the data. So, need to impute with median value: 4

Visualizing:

CNT\_CHILFREN

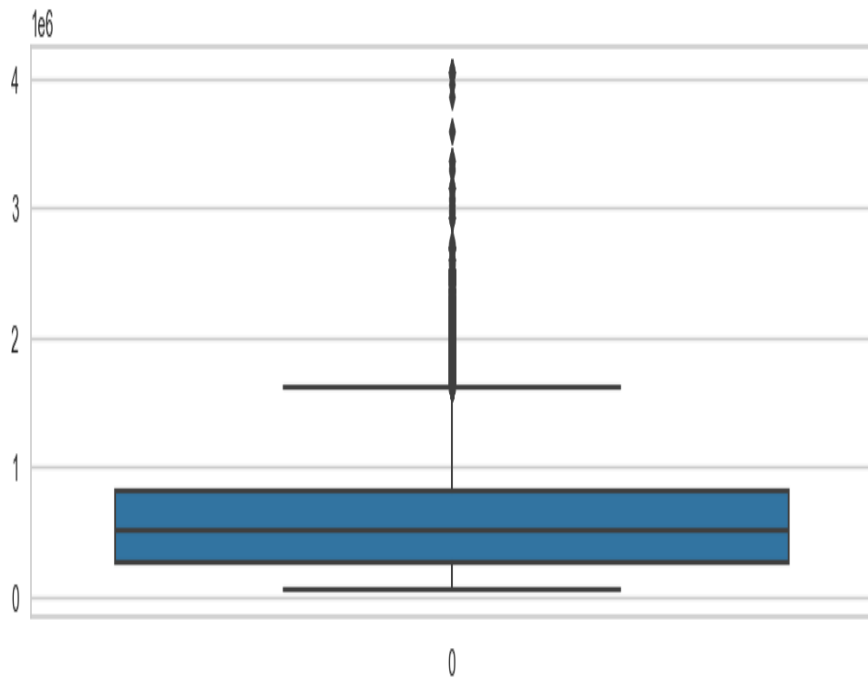


AMT\_INCOME\_TOTAL

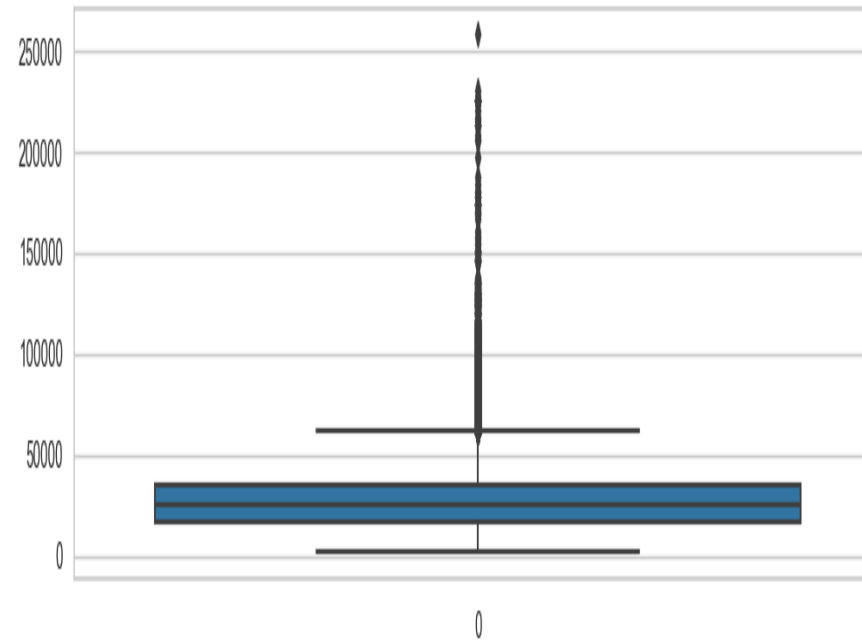


- 1<sup>st</sup> quartile is missing for CNT\_CHILDREN which means most of the data are present in the 1<sup>st</sup> quartile.
- In AMT\_INCOME\_TOTAL only single high value data point is present as outlier.

## AMT\_CREDIT

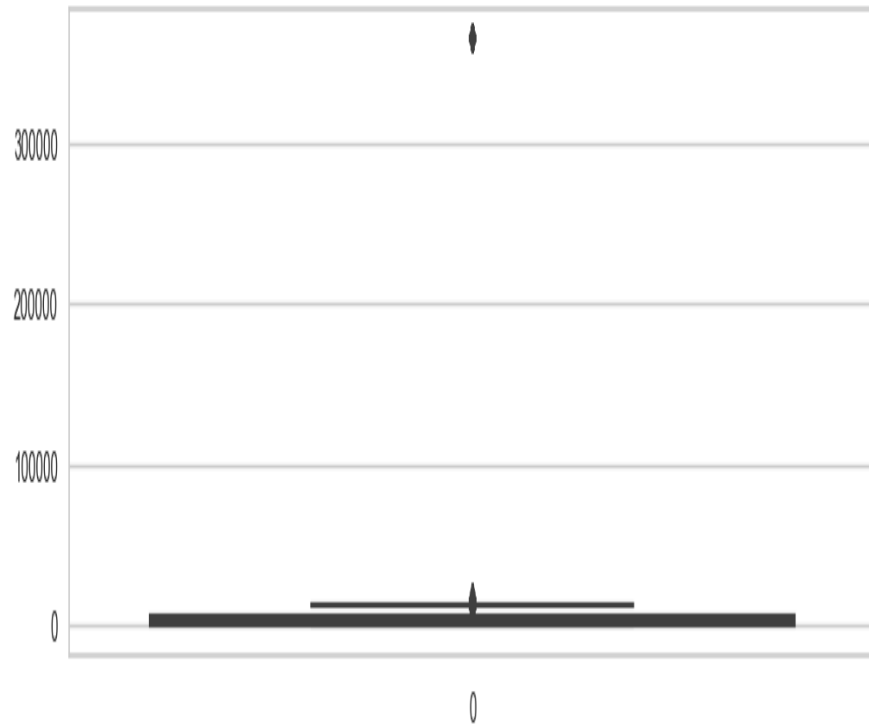


## AMT\_ANNUITY

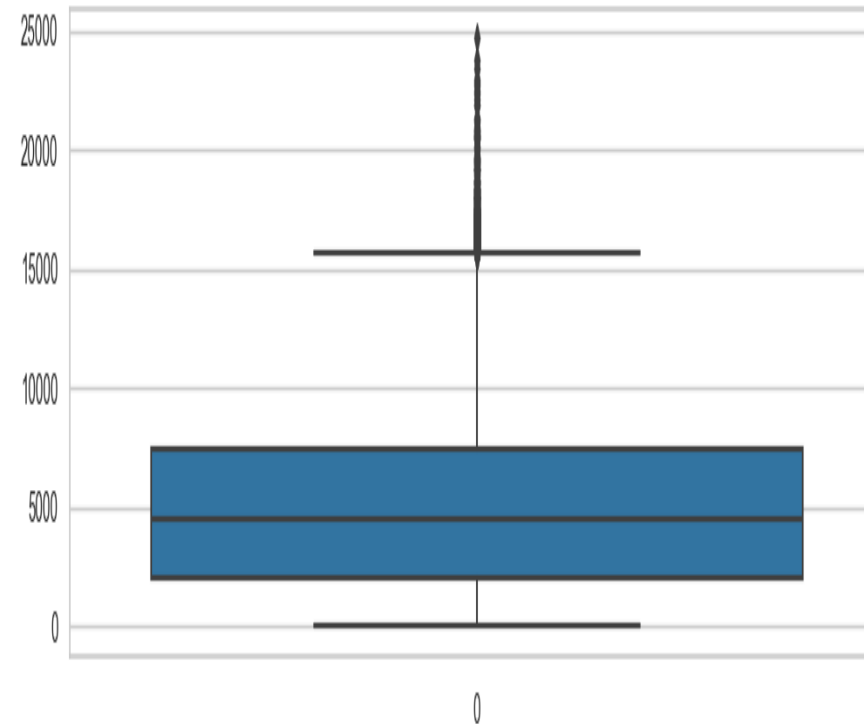


- AMT\_CREDIT has little bit more outliers.
- 1<sup>st</sup> quartiles and 3<sup>rd</sup> quartile for AMT\_ANNUITY is moved towards first quartile.

## DAYS\_EMPLOYED

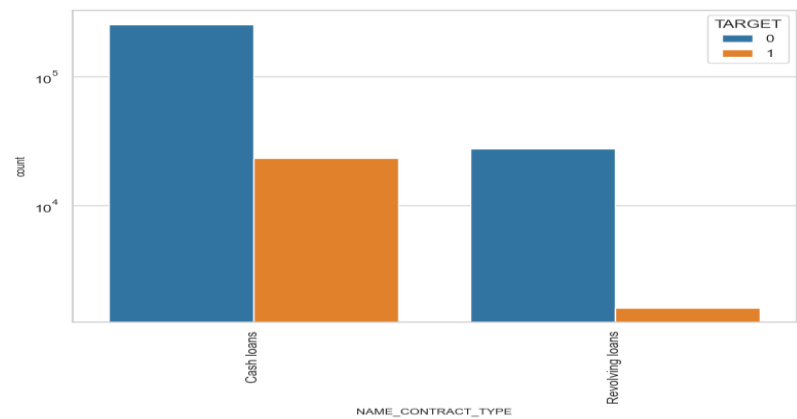
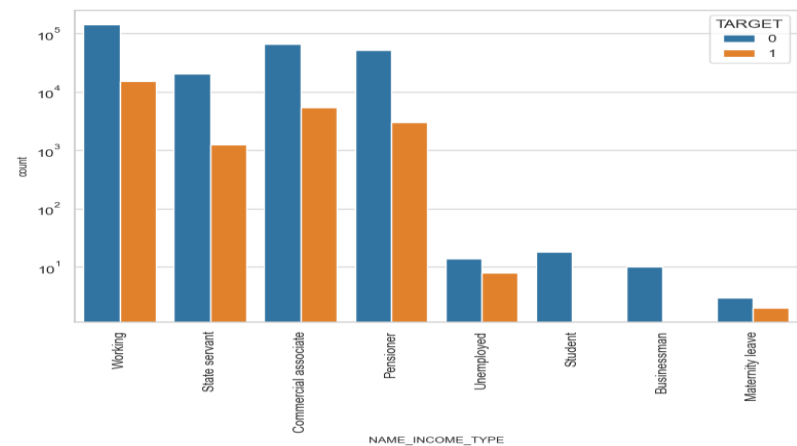
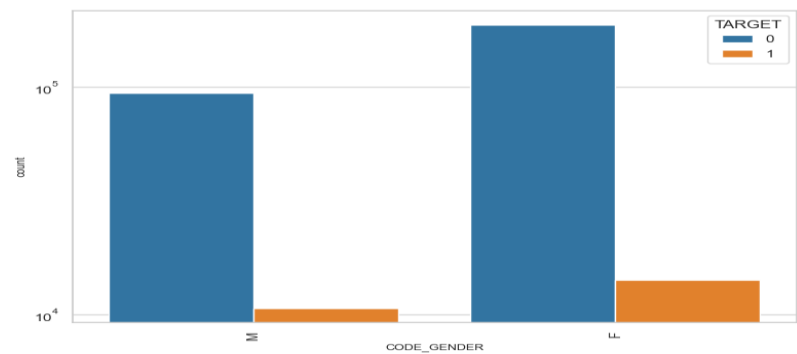
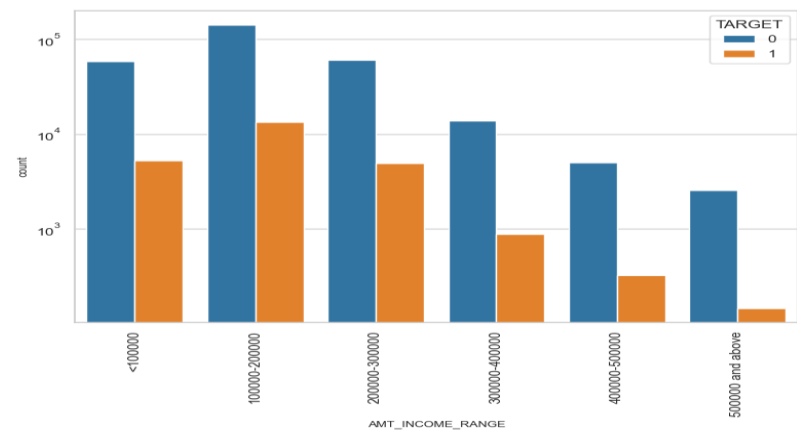


## DAYS\_REGISTRATION



- 1<sup>st</sup> quartile and 3<sup>rd</sup> quartile for DAYS\_EMPLOYED is stays first quartile.
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- ❖ From above boxplots, we found that numeric columns have outliers.

# Univariate Analysis





# Observation

## AMT\_INCOME\_RANGE:

- People in range 100000-200000 have high number of loan and also have high in defaulter.
- Income segment >500000 has less defaulter.

## CODE\_GENDER:

- The percentage defaulters are more in Male than Female.

## NAME\_INCOME\_TYPE:

- Student and business are higher in percentage of loan repayment.
- Working, State servant and Commercial associates are higher in default percentage.
- Maternity category is significantly higher problem in repayment.

## NAME\_CONTRACT\_TYPE:

- For contract type cash loans are higher in number of credits than revolving loans contract type.
- By above graph revolving loans is small amount compared to cash loans.

# Conclusion from the Analysis

- ▶ Bank must target more on contract type.
- ▶ Bank must focus less on income type working.

THANK YOU