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Project: Bank Marketing (Campaign)

Batch code: LISUM09

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Problem description

- ABC Bank wants to sell its term deposit product to customers.

- Before launching the product, they want to develop a model that will help them in understanding whether a particular customer will buy their product or not (based on customer's past interaction with bank or other Financial Institution).

- ABC Bank wants to use ML (machine learning) model to shortlist customers whose chances of buying the product are higher.

- They want their marketing channel (tele marketing, SMS/email marketing etc) to focus only on those customers whose chances of buying the product are higher.

- The data is related with direct marketing campaigns of a Portuguese banking institution. The marketing campaigns were based on phone calls. Often, more than one contact to the same client was required, in order to access if the product (bank term deposit) would be ('yes') or not ('no') subscribed.

- The classification goal is to predict if the client will subscribe (yes/no) a term deposit (variable y).

Github repo link:

https://github.com/Saad-code13/Internship_Assignment/tree/main/week%209

Data cleansing and transformation done on data:

No Null data is in data. However, some values are used as null.

From the data we can assume that :

- Pdays null value is -1
- And previous null value is 0
- Both of these values are connected since the values that have a -1 is pdays have a 0 in previous. their total number is 36 954

Using the describe function to separate numeric value into different categories:

- Age -> age group:
    - <33
    - 33-39

- Balance -> balance group:
    - <=72
    - 72-448
    - 448-1428
    - >1428
- Duration -> duration time:
    - <=103
    - 103-180
    - 180-319
    - >319
- Campaign -> campaign #:
    - 1
    - 2
    - >3
- Pdays and previous -> contacted:
    - No
    - Yes