# project Description



**Presented by: Waad alduhami** 

### **Abstract:**

# THE TARGET IN THE PROJECT IS (PERSONAL LOAN )

PRESONAL LOAN: A personal loan (also known as a consumer loan) describes any situation in which an individual borrows money for personal need, including making investments in a company

#### Date:

The file Bank contains data on 5000 customers. The data include customer demographic information (age, income, etc.), the customer's relationship with the bank (mortgage, securities account, etc.), and the customer response to the last personal loan campaign (Personal Loan)

## **Some Feature**

| Feature       | Description  |
|---------------|--|
| ID            | Customer id  |
| Age           | Customer's age in completed years  |
| income        | Annual income of the customer  |
| CCAvg         | Avg spending on credit cards per month                                   |
| Personal Loan | Did this customer accept the personal loan offered in the last campaign? |
| Experience    | years of professional experience   |

| Education | Education Level.         |
|-----------|--------------------------|
|           | 1: Undergrad;            |
|           | 2: Graduate;             |
|           | 3: Advanced/Professional |
|           |                          |

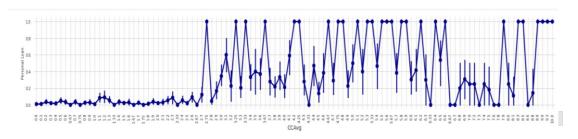
#### Tools:

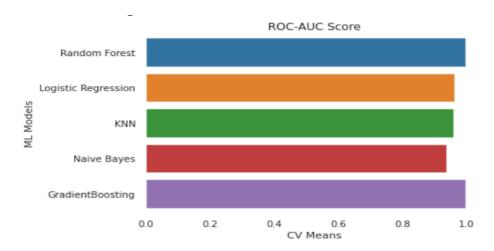
- Numpy and Pandas
- Scikit-learn for modeling
- Matplotlib and Seaborn for plotting

#### Communication:



# The relation between ccavg, personal loan





We chose the best model which is (GradientBoosting)
Cv score:0.9976