



# **Analysis of Direct Marketing Campaign Data**

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# Objective:

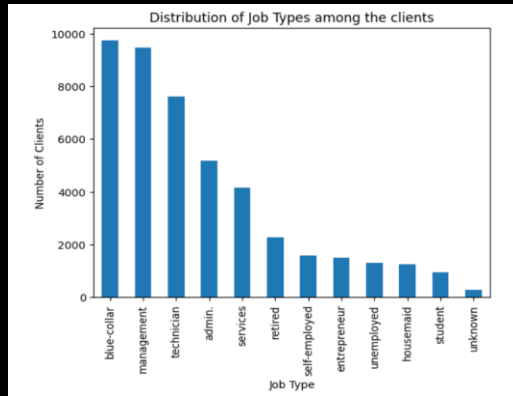
The primary goal is to delve into the comprehensive data collected from direct marketing campaign conducted by the Portuguese banking Institution. This involves understanding the key characteristics of the dataset and uncovering meaningful patterns and trends.

**Source :** Banking\_data.csv

## Data Overview :

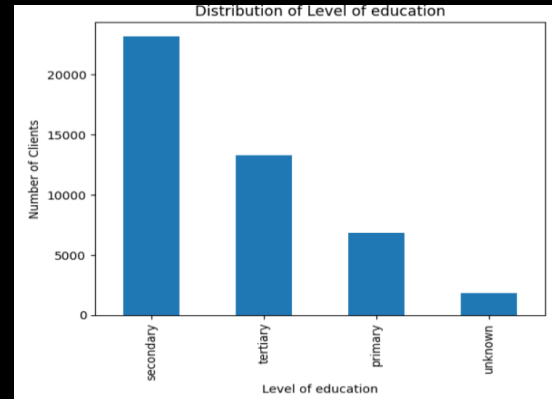
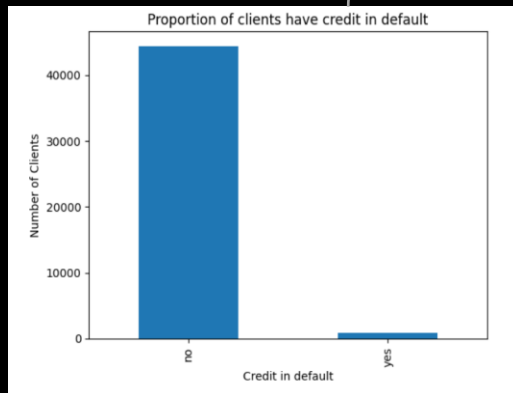
1. It contains 45,211 rows and 18 columns
  2. The dependent variables are 'Age', 'Job', 'Marital', 'Education', 'Default', 'Balance', 'Housing', 'Loan', 'Contact', 'Day', 'Month', 'Duration', 'Campaign', 'pdays', 'Previous', 'poutcome'.
  3. The target variables is 'y' which indicates subscription to term deposit(yes/no).
- The analysis aims to identify correlations between various attributes and the target variable (term deposit subscription) and provide actionable insights for optimizing future marketing campaigns, targeting client segments, refining communication strategies, and improving overall campaign efficiency.

# Bar plots

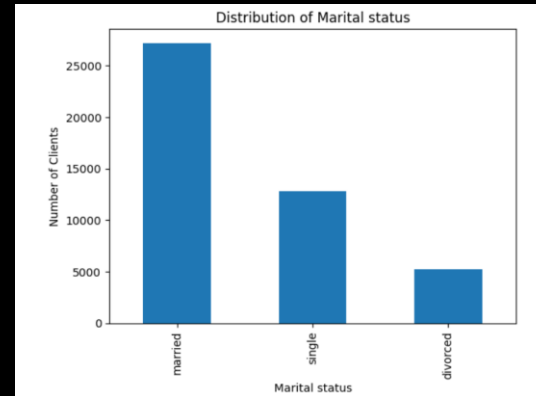
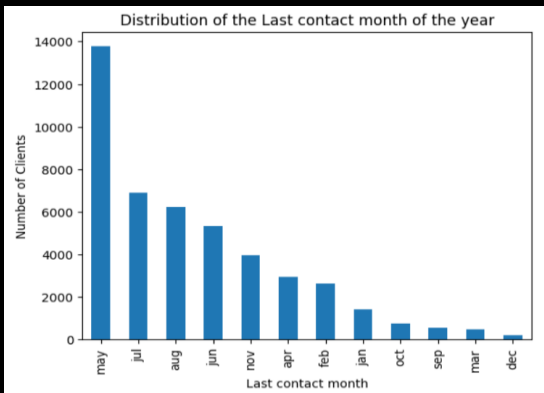


Predominantly employed in blue-collar and management sectors

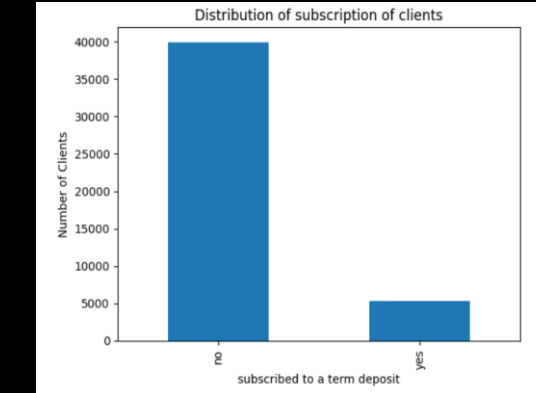
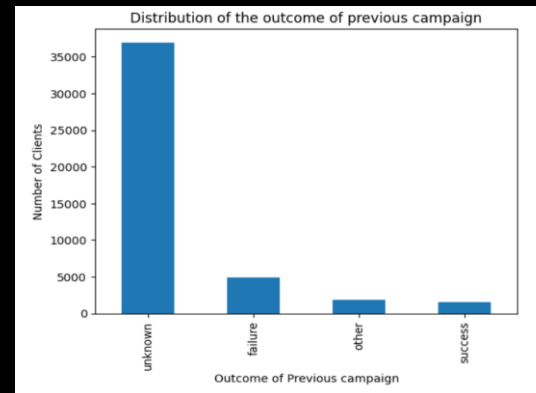
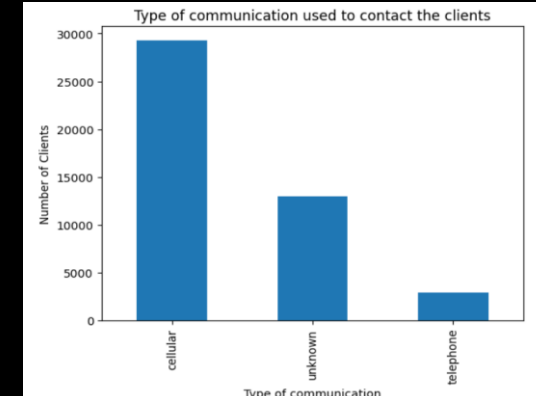
around 5% client have credit in default



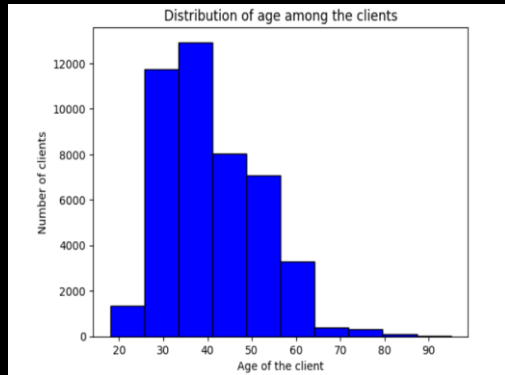
A significant proportion have secondary and tertiary education



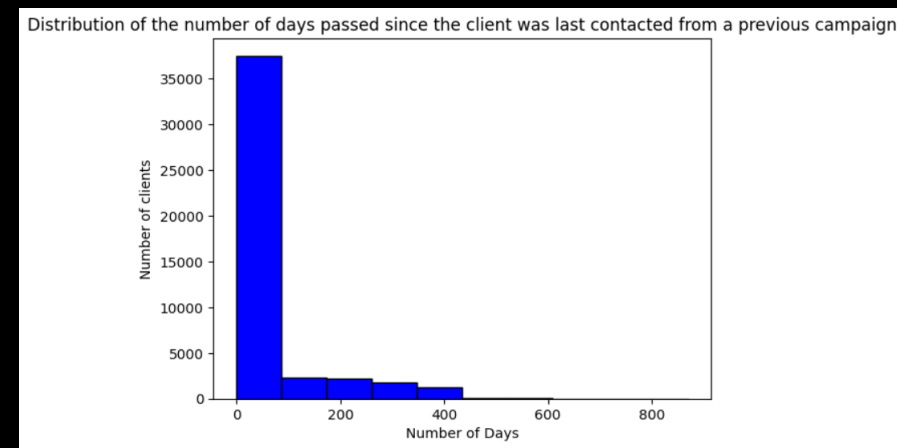
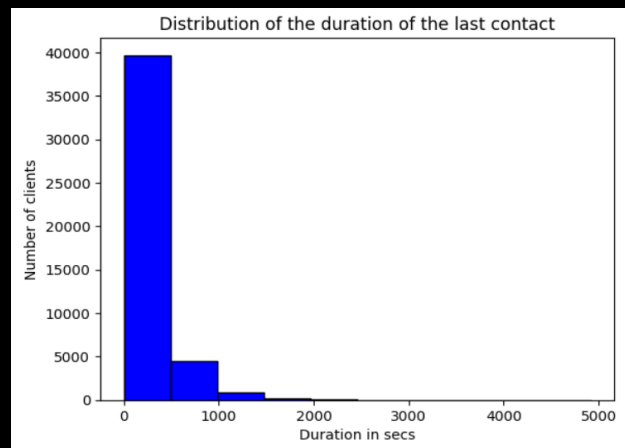
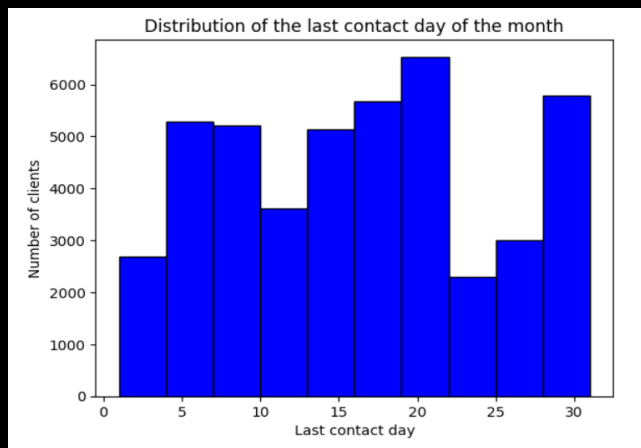
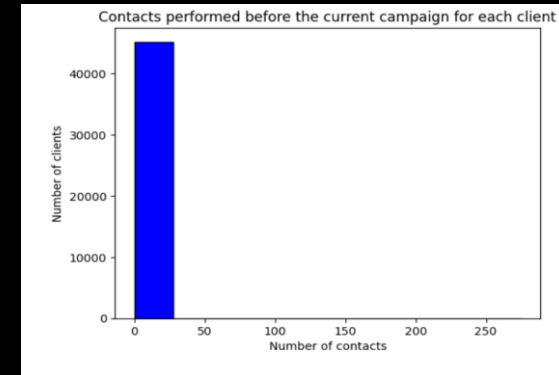
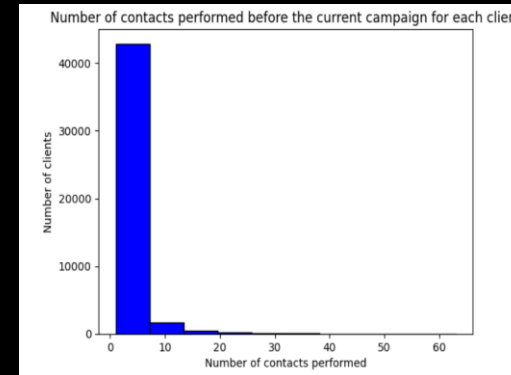
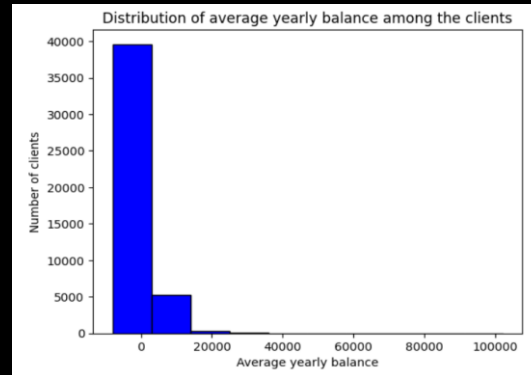
Most clients are married



# Histogram



Most of the client fall within the range of 27-40



- **Correlation:**

Positive correlations were observed with attributes like age, balance, and contact duration.

Strong associations were found between job type, marital status, education level, and the target variable.

- Based on the analysis of the Portuguese banking institution's marketing campaign data, some strategies can be implemented to enhance future marketing efforts:

- 1. Targeted Marketing Campaigns:**

- Develop targeted marketing campaigns aimed at clients within the 30-45 age range, as they show higher subscription rates for term deposits.
- Prioritize clients in management sectors and those with tertiary education, as these groups are more likely to subscribe

- 2. Personalized Communication:**

- Craft personalized messages that resonate with different demographic segments, emphasizing the benefits of term deposits that cater to their specific needs and financial goals.
- Continue using telephone as the primary contact method due to its effectiveness but also explore and integrate other channels like email and SMS for a multi-channel approach.



**THANK YOU**