

## **Data Analyst Test Statement :**

There are three parts of this test, you can do the test using R/Python (choose one of them) and please organize your work using R markdown or Python Notebook.

## **About Dataset :**

This is the classic marketing bank dataset uploaded originally in the UCI Machine Learning Repository. The dataset gives you information about a marketing campaign of a financial institution in which you will have to analyze in order to find ways to look for future strategies in order to improve future marketing campaigns for the bank.

Link : <https://archive.ics.uci.edu/ml/datasets/bank+marketing>

## **Part 1 : Exploratory Data Analysis**

- a. How can you handle null values and outliers from the data? Please wrangle/handle them
- b. Are there any variables that warrant transformations?
- c. Do you notice any patterns or anomalies in the data? Can you plot them?

## **Part 2: Analysis using statistical method**

You work across different departments, and your coworkers are from different backgrounds. Please run any statistical tests to answer these questions & propose data-driven action recommendations to your CEO. Please explain your results with non-statistical things so your CEO can understand your findings.

- a. Is there a significant relationship between marital status and success of a campaign?
- b. Your supervisor insists that people who have job as blue-collar are least likely to be given a loan. Justify or refute this statement using an appropriate statistical test

## **Part 03: Data Visualization**

Please plot and visualize the answers to the below questions.

- a. Which job has the most loan?
- b. Which marital status has the most loan?

## **Notes :**

**There is no exact right way to do this. We are interested in the choices that you make, how you justify them, and your development process.**

**Good Luck.**