TEST

Business Understanding:

Upon receiving a loan application, the company must assess the applicant's profile to decide on loan approval, which involves two types of risks:

- Not approving the loan for an applicant likely to repay would result in a loss of business for the company.
- Approving the loan for an applicant likely to default would lead to a financial loss.

The provided data contains information about loan applications at the time of applying, categorized into two scenarios:

- Clients facing payment difficulties: These individuals have a history of late payments for more than X days on at least one of the first Y installments in the loan sample.
- All other cases: This category includes clients who made timely payments.

When a client applies for a loan, there are four possible outcomes:

- Approved: The company approves the loan application.
- Cancelled: The client cancels the application either due to a change of mind or receiving unfavorable terms.
- Refused: The company rejects the loan application because the client does not meet their requirements.
- Unused offer: The client cancels the loan at different stages of the process.

Data for test:

https://drive.google.com/drive/folders/1-RwCbD1qN3GAvm7rfd0zK1MfVTxfhGuk?usp=sharing

Data Understanding: The dataset comprises 3 files:

1. 'application_data.csv': This file contains all client information at the time of loan application, including whether the client experiences payment difficulties.
2. 'previous_application.csv' contains information about the client's previous loan data. It contains the data on whether the previous application had been Approved, Cancelled, Refused or Unused offer.
3. 'columns_description.csv': This file serves as a data dictionary, providing descriptions and meanings of the variables used in the dataset.

The main objective of this TEST is to identify patterns indicating clients who might have difficulty paying their installments. This information will be used to make informed decisions, such as denying loans, reducing loan amounts, or offering higher interest rates to riskier applicants. Understanding the factors driving loan defaults will help the company manage its portfolio and assess risks effectively.