# DATA AVAILABLE:

* CC GENERAL.csv

# BUSINESS CONTEXT:

This case requires trainees to develop a customer segmentation to define marketing strategy. The sample dataset summarizes the usage behavior of about 9000 active credit card holders during the last 6 months. The file is at a customer level with 18 behavioral variables. Expectations from the Trainees:

# EXPECTATIONS FROM THE TRAINEES:

* Advanced data preparation: Build an ‘enriched’ customer profile by deriving “intelligent” KPIs such as:
  + Monthly average purchase and cash advance amount
  + Purchases by type (one-off, installments)
  + Average amount per purchase and cash advance transaction,
  + Limit usage (balance to credit limit ratio),
  + Payments to minimum payments ratio etc.
* Advanced reporting: Use the derived KPIs to gain insight on the customer profiles.
* Identification of the relationships/ affinities between services.
* Clustering: Apply a data reduction technique factor analysis for variable reduction technique and a clustering algorithm to reveal the behavioural segments of credit card holders
* Identify cluster characterisitics of the cluster using detailed profiling.
* Provide the strategic insights and implementation of strategies for given set of cluster characteristics

**DATA DICTIONARY:**

**CUST\_ID**: Credit card holder ID

**BALANCE**: Monthly average balance (based on daily balance averages) **BALANCE\_FREQUENCY:** Ratio of last 12 months with balance **PURCHASES:** Total purchase amount spent during last 12 months **ONEOFF\_PURCHASES:** Total amount of one-off purchases **INSTALLMENTS\_PURCHASES**: Total amount of installment purchases **CASH\_ADVANCE**: Total cash-advance amount

**PURCHASES\_ FREQUENCY**: Frequency of purchases (Percent of months with at least one purchase)

**ONEOFF\_PURCHASES\_FREQUENCY:** Frequency of one-off-purchases **PURCHASES\_INSTALLMENTS\_FREQUENCY**: Frequency of installment purchases **CASH\_ADVANCE\_ FREQUENCY**: Cash-Advance frequency **AVERAGE\_PURCHASE\_TRX**: Average amount per purchase transaction **CASH\_ADVANCE\_TRX**: Average amount per cash-advance transaction **PURCHASES\_TRX**: Average amount per purchase transaction

**CREDIT\_LIMIT**: Credit limit

**PAYMENTS:** Total payments (due amount paid by the customer to decrease their statement balance) in the period

**MINIMUM\_PAYMENTS:** Total minimum payments due in the period. **PRC\_FULL\_PAYMEN**: Percentage of months with full payment of the due statement balance **TENURE**: Number of months as a customer