**Assessment Test - 04**

**Problem Statement:** Propose a model to predict **credit card type** by using different AI/ML algorithms and suggest the best algorithm with evaluation metrics.

**Salient Business Features:**

Business is serving in 5 regions

Credit Card Types - Silver, Gold & Platinum

Bank data is provided to consultants:

* Train data: To train the models and ~ 30,246 records with 28 variables
* Validation data: To validate the model and ~ 6060 records without target variable

You need to provide the submission of results in **BankData\_Submission** file format and share the results along with your python solution files.

**Client Expectations:**

* To address the missing values in the train & validation datasets
* Eliminate the outliers in train & validation datasets, if necessary
* Expecting to use appropriate variables encoding techniques
* Use scaling techniques for better efficiency
* Implement hyper parameter tuning by using Random Search and Grid Search
* Analysis of Bank Data problem with top 10 algorithms in Banking industry
* Suggest the best AI/ML algorithm with evaluation metrics