<u>Instructions to Set up the R Application</u>

- R application for Telemarking in Banking was developed in the R studio version 4.0.3

- The Dataset referenced for the application is "bank-additional-full.csv" which has to be located in the current working directory

- Titan_PBA R project folder contains four R files :

1) BankingTeleMarketingMain.R – This is the Main file from where the project execution begins
2) BankTeleMEDAfunctions.R – This file contains the code for "Exploratory Data Analysis"
3) BankTeleMDataPreparation.R- This file contains the code for "Data Pre-Processing"
4) DataPreprocessingFunctions.R- This file contains generic functions which are used for Data preprocessing and to determine the threshold.

<u>Pre-requisites to run the project:</u>

- Pacman to be installed in the R studio to run the below libraries referenced in the application

```
# ********************************************************************************
# Define and then load the libraries used in this project
# Library from CRAN     Version
#   pacman                0.5.1
#   outliers              0.14
#   corrplot              0.84
#   MASS                  7.3.53
#   formattable           0.2.0.1
#   stats                 4.0.3
#   PerformanceAnalytics  2.0.4
#   ggcorrplot            3.3.3
#   ROCR                  1.0.11
#   mice                  3.13.0
#   dplyr                 1.0.5
#   VIM                   6.1.0
#   randomForest          4.6.14
#   smotefamily           1.3.1
#   reshape2              1.4.4


MYLIBRARIES<-c("outliers",
               "corrplot",
               "MASS",
               "formattable",
               "stats",
               "caret",
               "randomForest",
               "PerformanceAnalytics",
               "ggcorrplot",
               "ROCR",
               "mice",
               "dplyr",
               "VIM",
               "randomForest",
               "smotefamily",
               "reshape2")
```

- Before running the Main executable file (BankingTeleMarketingMain.R), set the working directory to the project directory from the session option in the toolbar

<u>Execute the Application :</u>

- To run the code, load and run the BankingTeleMarketingMain.R file in R studio