**Problem Statement**

Your client is a retail banking institution. Term deposits are a major source  
of income for a bank.  
A term deposit is a cash investment held at a financial institution. Your  
money is invested for an agreed rate of interest over a fixed amount of  
time, or term.  
The bank has various outreach plans to sell term deposits to their  
customers such as email marketing, advertisements, telephonic marketing  
and digital marketing.  
Telephonic marketing campaigns still remain one of the most effective way  
to reach out to people. However, they require huge investment as large call  
centers are hired to actually execute these campaigns. Hence, it is crucial  
to identify the customers most likely to convert beforehand so that they can  
be specifically targeted via call.  
You are provided with the client data such as : age of the client, their job  
type, their marital status, etc. Along with the client data, you are also  
provided with the information of the call such as the duration of the call, day  
and month of the call, etc. Given this information, your task is to predict if  
the client will subscribe to term deposit.  
**Data**You are provided with following files:  
1. train.csv : Use this dataset to train the model. This file contains all the  
client and call details as well as the target variable “subscribed”. You have  
to train your model using this file.  
2. test.csv : Use the trained model to predict whether a new set of clients  
will subscribe the term deposit.  
**Data Dictionary**Here is the description of all the variables :

|  |  |
| --- | --- |
| **Variable** | **Definition** |
| ID | Unique client ID |
| age | Age of the client |
| job | Type of job |
| marital | Marital status of the client |
| education | Education level |

|  |  |
| --- | --- |
| default | Credit in default. |
| housing | Housing loan |
| loan | Personal loan |
| contact | Type of communication |
| month | Contact month |
| day\_of\_week | Day of week of contact |
| duration | Contact duration |
| campaign | number of contacts performed during this campaign to the client |
| pdays | number of days that passed by after the client was last contacted |
| previous | number of contacts performed before this campaign |
| poutcome | outcome of the previous marketing campaign |
| Subscribed (target) | has the client subscribed a term deposit? |

**How good are your predictions?  
Evaluation Metric**The Evaluation metric for this competition is accuracy.  
**Solution Checker**You can use solution\_checker.xlsx to generate score (accuracy) of your  
predictions.  
This is an excel sheet where you are provided with the test IDs and you  
have to submit your predictions in the “subscribed” column. Below are the  
steps to submit your predictions and generate score:  
a. Save the predictions on test.csv file in a new csv file.  
b. Open the generated csv file, copy the predictions and paste them in the  
subscribed column of solution\_checker.xlsx file.  
c. Your score will be generated automatically and will be shown in ​**Your  
Accuracy Score**​ column.