

The year in which the story takes place is 2025, the month is October.

The Israel Cross organization is a new non-profit organization that collects donations from individuals to help people who fell into a financial crisis due to a health problem. Every month, the organization's representatives contact the citizens registered in the organization's database and ask them to donate an amount of money as they see fit.

Reference is made by telephone.

In the past year, the organization used to contact 1000 people every month for a donation request. However, the total contributions from these people were relatively low, and a lot of money was wasted on telemarketing efforts by the organization's representatives aimed at people who chose not to donate.

Therefore, the organization decided to change its approach, and optimize the telemarketing system using science data models. In addition, It was decided to limit the number of telemarketing calls, in order to reduce costs, and to address only 90 people each month.

Congratulations! You have been selected to advise the organization in selecting 90 potential donors out of 1000 that should be approached per month October.

Please note: a potential donor who does not receive a phone call from the organization does not donate at all.

You have two files at your disposal

1. Jan - Sep 2025 donations
2. Potential donors for October 2025 from which the 90 will be selected.

Build a model (or models) that will allow you to select the 90 potential donors from the 1000 people in the file

csv.2022C\_holdout, for whom the predicted donation total will be maximum, and to whom you will recommend to the Israel Cross organization to call.

Attached to the exercise are two R files (scripts):

- 1.R.Script - this is your working file, in this file you must load the data, run the models and generate the predictions. Note that we have chosen names for some of the objects for you, please stick to these names.
- 2.R.Compiler – this is a file that checks that the code you wrote runs and produces a CSV file as required.