## The alternative approach

After several weeks of struggling to find a good feasible solution for the Cambio problem, we decided that this method was not going to work out. We thought out an entire new approach and came with the following:

Each iteration of the algorithm starts with our previously generated initial solution where the cars are not assigned to a zone yet. The list of requests is shuffled so that the solution won’t be the same for every iteration. We do this because the first few requests of that list will determine which car will be assigned to which zone. For every request the algorithm will first search for a vehicle suited for the current request. If no suitable cars were found, a random car that can be assigned to the current request will be used and will be assigned to the preferred zone of the request.

Every time a solution has been completely generated, the cost is calculated. The solution that has the lowest cost at the end of the execution time will be returned as the best solution.