USER MANUAL

How to use the Optimizer

1. Place the no. of variables
2. Place the no. of expressions of your system excluding the objective function
3. Choose the type of optimization(Minimization or Maximization)
4. Insert the values of each expression
5. Insert the values of the objective function

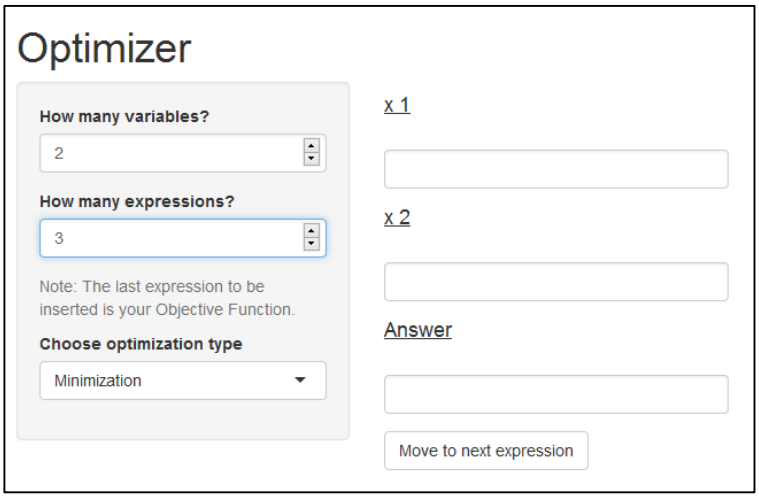

Illustration 1

The Optimizer has 2 divisions: side panel and main panel. Left panel asks for the details of the system and the type of optimization that the user intends to use. The main panel contains input text areas for the values of the expressions in the system. The input text areas will adjust depending on the number of variables that will be set.

Changing the no. of variables

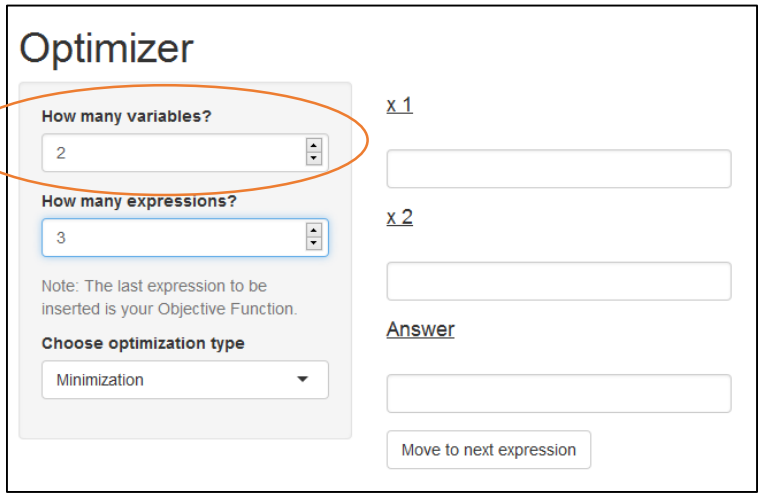

Illustration 2

The user can set the no. of variables by adjusting the first numeric input space. The values should not be 0 and negative numbers.

Changing the no. of expressions

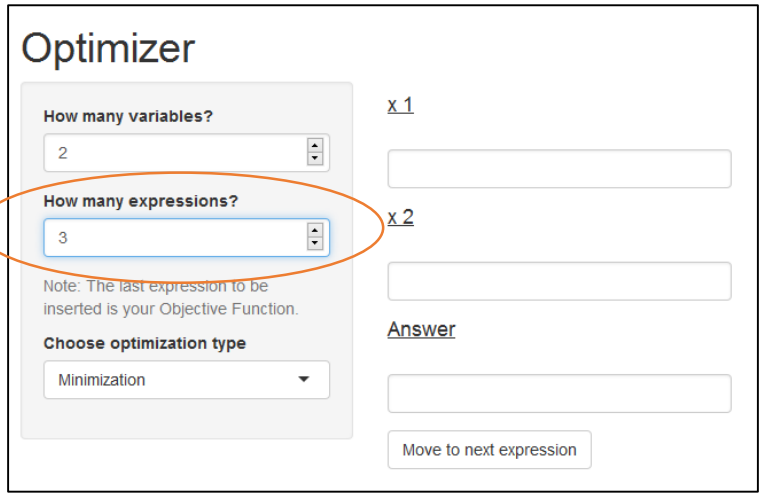

Illustration 3

The second numeric space asks for the no. of expressions of the system. This excludes the objective function. For example, given a system of equations:

$2x + 4y >= 6$ $3x + 7y >= 5$ $6x – 8y >= 5$

Objective Function: $z = 4x + 56y$

The system has 3 expressions with 2 variables.

Setting the Optimization Method to be used

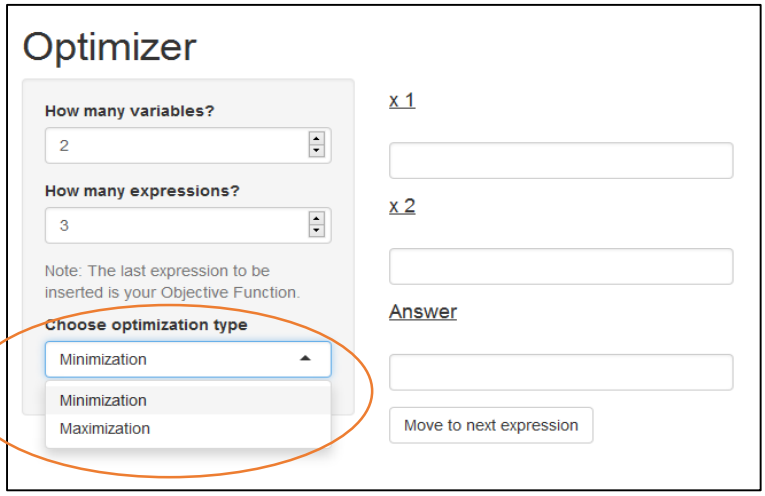

Illustration 4

The user can set the type of optimization method to be used by selecting the dropdown box. The user can choose between Minimization and Maximization.

Forming the system

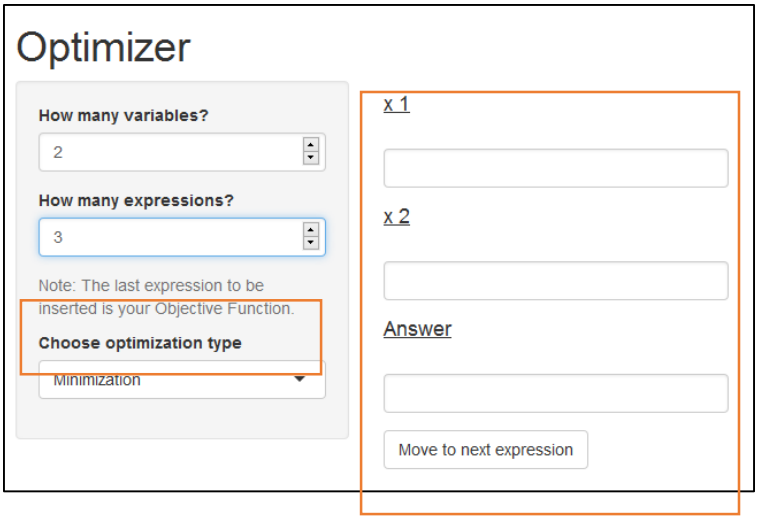

Illustration 5

The user should add the coefficients of the variables one at a time. Once done with one expression, the user should click the “Move to next expression” to go the next one. Note that the last expression to be inserted is your Objective Function.