**NUMBRIX**

This program solves Numbrix in Allegro CL.

**Requirements:**

* Allegro CL 9.0

**How to run using Allegro CL:**

* Open Allegro CL and go to the Listener Window.
* Open file using (setq infile (open “path\\Numbrix.lsp” :direction :input))
* Load the file using (load infile)
* To run the program, type (numbrix)

There are 17 boards hard-coded in ‘Numbrix.lsp’.

(1,1) of the board is the lower left corner. Moving towards the right, the column number increases. Moving up, the row number increases.

Board positions:

(n,1) (n,2) ….. (n,n)

. . . .

. . . .

(2,1) . . (2,n)

(1,1) (1,2) ….. (1,n)

After running the program by typing (numbrix), choose a board from among the 17 options by typing the board number. Next choose the mode in which you want to run your program in. Press 1 for manual mode and 2 for auto mode.

* Manual mode

Three values must be entered by the user to play this game: the row and column values of the cell; and the number to be stored in that cell.

For example,

Enter row, column and number: 2 3 4

Here, 2, 3 and 4 are row value, column value and the number to be filled respectively.

The user can change a move entered previously.

* Auto mode

The initial board will be displayed once. Next the AI result will be displayed followed by the traversing of the board from 1 to n2. At the end time taken to solve the board will be displayed.