

# Manual

## Maze Solver

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Prolog Project

## How to run it?

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- run goTest.pl file

Character	Variable used
L	List of ints
R	Product of elements of L
U	Number of cells with openings up
D	Number of cells with openings down

In `prod(L,R)`,  $R=1$  if  $L=[]$

`fill(N,X,R)` which denotes that a list containing  $N$  copies of  $X$ .

`genN(N,R)` in  $N$  = non zero positive integer, and  $R$  = integer values between 0 and  $N - 1$ .

`genXY(2,R)`. then  $R = [0,0]$ ,  $R = [0,1]$ ,  $R = [1,0]$ ,  $R = [1,1]$ .

`solve`. True if maze is solvable, fails otherwise.

`findDistance(L)` where  $L$  is list of coordinates of cells at distance  $D$  from maze start.

`cell(X,Y,Z,Weight)` where  $X$  and  $Y$  are cell position,  $Z$  denotes any one side from u,d,l and r (where u=up, d=down, l=left, r=right) is open. Weight denotes the fact indicating the allowed weight granted for that direction.

`path(N,Sx,Sy,Dir)` where  $N$  is size of maze square(i.e. 4x4, 5x5).