CSPC 54 : Prolog Assignment

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Instructions :

Create a 3 x 3 grid with numbers initialised from 1 – 9.

after a sequence of operations, the numbers should sum to 50 to 60.

Code :

addAtI(0,[H|T],X, [HN|T]):-

 HN is H+X.

addAtI(I,[H|T],X,[H|TN]):-

 IN is I-1,

 addAtI(IN,T,X,TN).

addToMatrix([],[]).

addToMatrix([H|T],[NH|NT]):-

 addAtI(2,H,2,NH),

 addToMatrix(T,NT).

makeChange([],[]).

makeChange([H|T],[NH|NT]):-

 addToMatrix([H|T],[HH|NT]),

 addAtI(0,HH,-1,NH).

**INPUT:** makeChange([[1,2,3],[4,5,6],[7,8,9]], X).

**OUTPUT:** X = [[0,2,5],[4,5,8],[7,8,11]]

**Screenshots:**

Graphical user interface, text, application

Description automatically generated

Sequence of Operation

Increment third element by the value of 2 in every row.