## Medicine

First function, Test is implemented which have round number in first parameter medicine in second parameter.

Function Test is asserted in such a way:

* Using 'forall' operator, we take each medicine in one round using Test, if it is true, it will return 1. It is stopped when sum of 1s becomes 3 indicating only 3 medicines can be tested in one round.
* Using 'not exist' operator it is checked that two medicine does not occur in pair in two different rounds by making both medicine and round distinct and checking if Test returns true. (Medicine 1 and 2 and Round 1 and 2 has to be between 1 and 7 it is done by using '<=').
* Checking if two medicine occur in pair once by making medicines distinct but not the round.

## Queen 4

Starting by first declaring all positions where a queen can be.

Then asserting in a way:

* There are only 4 queens on the board by using 'or' operator to put each queen in either of the column.
* There is only 1 queen by row by checking with one cell to other cell that exists in the same row by asserting two queens in same row with 'and' operator then using 'or' operator to check for other possible ways the queens can be in other same rows and at last using 'not' in whole thing, so it does not happen.
* There is only 1 queen by column by checking columns in the same way as the row.
* There is only 1 queen by diagonal by checking both diagonals in the same way as the row.

## Queen 8

Starting by declaring functions for row and column.

Asserting in such a way:

* Checking if row and column is between 1 and 8
* Using distinct function, checking there is only one queen in a row
* Same is done for columns
* Using distinct function, checking if one queen occurs in a diagonal (Both direction of diagonals is checked)