

## Computational Logic: CS 6374

This assignment can only be done on SICStus Prolog.

**Problem 1:** Program the N-Queen problem in CLP(FD). Follow the structure of the 8 queens problem whose code is given to you.

**Problem 2:** Write a CLP(FD) program to solve cryptarithmic addition problems.

**Problem 3:** Program the Zebra puzzle in CLP(FD).

**Problem 4:** Program the Sudoku Puzzle in CLF(FD). You should read input from the user which consists of a series of terms of the form:

$f(X,Y,Z)$ .

in a file called "input". The term  $f(X,Y,Z)$  states that the square at position (X, Y) has value Z ( $Z \in 1..9$ ). The input file is used to indicate the values given at the various squares in the puzzle. Your program should print the solution on the screen using write statements.