Jeffrey Zhang

CSC-366

Professor Graci

Part 2 : Program Description

The purpose of this programming assignment's program was to find a way to exhaustively solve a crypto-problem. A crypto problem is a math problem which is given an "n" amount of numbers within a constraint such as numbers 0 - 9, and also a specific "goal" which is also within 0 - 9. After a user types the amount of inputs, the output is then spit out as a fully parenthesized arithmetic solution, however sometimes there may not be a solution so the program will automatically say no solution. Let's move on to describe the program in more depth, firstly we used Prolog because it is great for logic based programming. This allows for the programmer to create knowledge bases and consult them. For this specific program I have referenced many other files, and after consulting them it will be linked together and be able to share the information within each one. The user may also produce random crypto problems or input their own, if they input their own and it does not meet the constraints the program will simply not be able to find a solution.