COMP4075/G54RFP Coursework Part III

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1 Project Overview

1.1 Motivation

The original basis for this project comes from a series of lab exercises from the G52AIM module, Artificial Intelligence Methods. The lab exercises involved implementing a variety of AI methods to solve some basic optimisation problems namely MAX-SAT problems.

Many of the methods implemented involved combining smaller functions together to create the desired effect. This could effectively translated into a functional programming setting. I thought it would be interesting to try and reimplement these some of these methods in Haskell to see the benefits of the FP paradigm to these AI methods.

1.2 Technical Background

1.2.1 MAX-SAT

MAX-SAT is an optimisation problem

The MAX-SAT problems were generated by a framework given in the original courseworks, this was via a java file that could be imported.

1.3 Aim of the Project

2 What I did — Needs another name

Discussion of the implementation, justifying key decisions and highlighting and explaining particularly interesting aspects, illustrating with excerpts from the developed code where appropriate.

3 Learnt stuff — Needs another name

A section reflecting upon what was learned from the project and your thoughts around the project topic from a real-world programming perspective.