Literature Review

Problem Statement

The goal of present project is an implementation of a program for automatic theorem proving.

Literature Reviewed

1. Artificial Intelligence: Elaine Rich , Kevin Knight , Shivashankar B Nair
   - Resolution principle
2. A Machine-Oriented Logic Based on the Resolution Principle: J. A. Robinson

3. Diagrammatic Reasoning: Cognitive and Computational perspective Janice Glasgow, N. Hari Narayanan, B. Chandrasekaran

   - Case-based reasoning (CBR) is an experience-based approach to solving new problems by adapting previously successful solutions to similar problems.
   - Proof tree search

Solution proposed

The program would read a set of logical sentences, covert these to an internal form, called *clause form*, and prove that one of the statements logically follows from the other statements. The proof would be made by resolution. Resolution principle is a procedure, which gain its efficiency from the fact that it operates the statements that have been converted to a very convenient standard form.