Artificial Intelligence and Decision Systems: Assignment #3 - Resolution-based Theorem Prover

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Abstract—In this assignment, a program was made in python to prove propositional logic theorems based on the resolution principle.

Index Terms—resolution theorem, propositional logic, clausal normal form, CNF, knowledge base.

1 Introduction

THE aim of the present short report is to ...

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2 Resolution Theorem Prover

3 Complementary Remarks

References

[1] S. Russell and P. Norvig, *Atificial Intelligence - A Modern Approach*, 3rd ed. Pearson, 2010.

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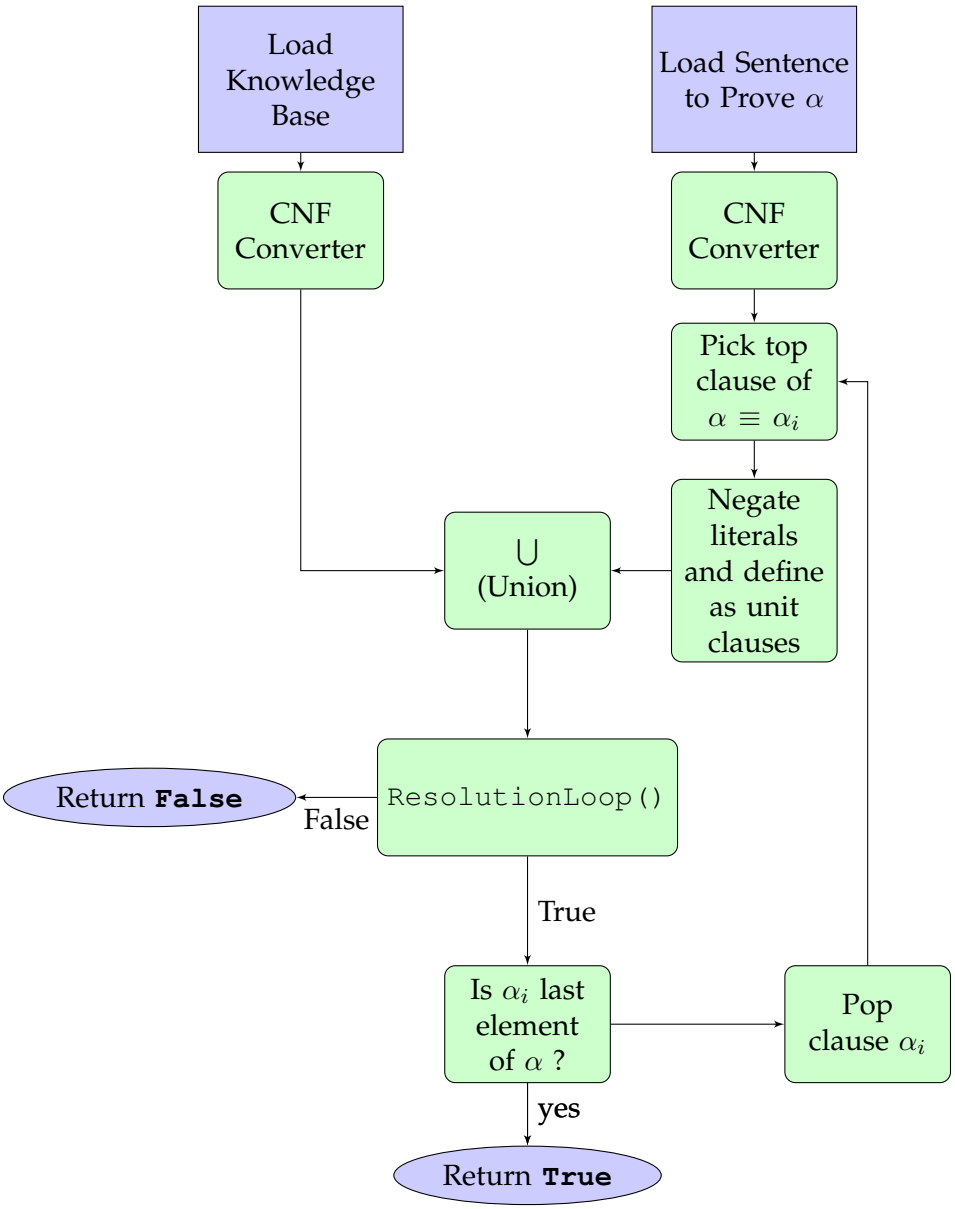
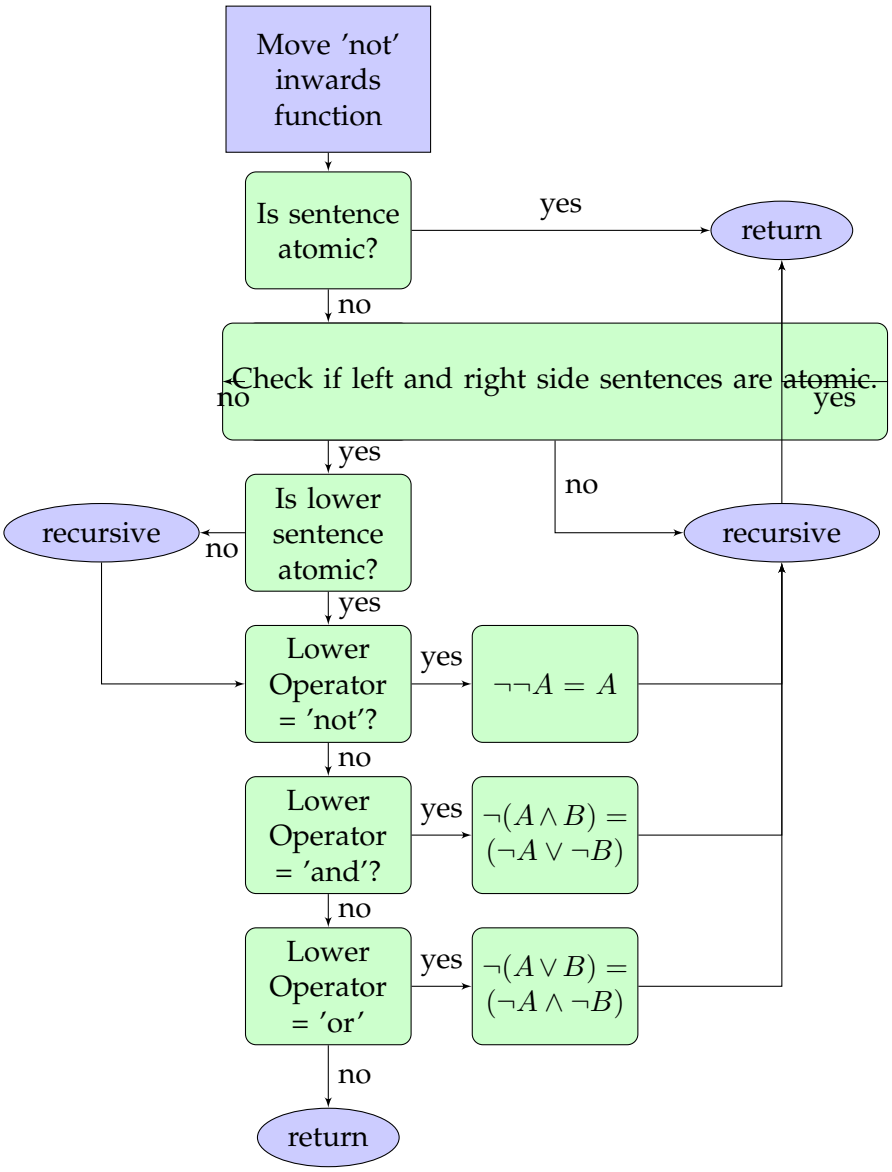
APPENDIX A RESOLUTION THEOREM PROVER ALGORITHM



APPENDIX B MOVE 'NOT' INWARDS FLOW CHART



APPENDIX C DISTRIBUTIVITY LAW FLOW CHART