

Grading summary

S1

1p – by default

2p – use of PROLOG (you will not get the points if you only write some predicates that do not regard the implementation of the resolution algorithm or you do not know to explain the code)

0.5p – the graphical user interface (in any language you choose)

0.5p – the use of grammars to translate the inputs in the desired format

a) **2p** – for your own example and its representation in FOL

b) **1p** – for CNF and application of the Resolution to prove the logical entailment

c) **1p** – correct implementation, run on your example and others and oral explanations of the code

d) **2p** – correct implementation (version from Brachman&Levesque), optimizations for Resolution (1p for clause elimination C5 p.6), reading the KBs from file, run on different examples and oral explanations of the code. Pay attention also to the efficiency (e.g., you should not apply the Resolution for the same clauses with respect to the same literal multiple times)

(at c) and d) you get 0p if you are not able to explain the code – no explanatory comments are allowed in your code)

S2

1p – by default

2p – use of PROLOG (you will not get the points if you only write some predicates that do not regard the implementation of the DP algorithm or you do not know to explain the code)

0.5p – the graphical user interface (in any language you choose)

0.5p – the use of grammars to translate the inputs in the desired format

1p writing the solution as required – in case of YES {a/true;b/false...}

2p two strategies to select the atom for the • operation and discuss/compare the results

3p – correct implementation (version from Brachman&Levesque), reading the KBs from file, run on different examples and oral explanations of the code (you get 0p if you are not able to explain the code – no explanatory comments are allowed in your code)

For both subjects, if you do not have the CNF clauses presented in the requirements already prepared for test (written in a file or somehow in GUI), I will consider that the program's answer for those clauses is not correct.

The grade of the project will be $55\%S1 + 25\%S2 + 10\%$ other questions from what was discussed at the course (C1-C5) (e.g., what is the Herbrand Theorem?) + 10% the writing/editing style of the written document (clarity, neatness, care, conciseness, indication of references).

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