Lars Karlsson
February 8, 1999
HKGAB4 - Lab 1-2

Linköping University
IDA

Lab 1-2: Atomic Sentences and Tarski's World

1 Goal

The goal of these labs is to familiarize you with the use of the Apple environment and Tarski's World. We will use the atomic sentence fragment of LFOL. In particular, we focus on

- How Tarski's World interprets the predicates in our block's world language.
- Building worlds which make atomic sentences true.
- Translating atomic sentences into natural language and natural language sentences into atomic sentences.
- Giving names to objects.

2 Preparation

The following should be done before the actual lab session:

- Read Chapter 2, (LFOL).
- Read Appendix A1-A4, (LFOL), browse the rest of the appendix.
- Do Problems 2.9-10, 2.15-16.

3 Lab Exercises

The following lab exercises, with the exception of exercise 2.1, are obligatory and should be done and saved on your diskettes (See the following section for additional information). For those of you using the IBM PC version of Tarski's World, use the names under the IBM column.

Exercise	SaveAs (Apple)	SaveAs (IBM)
2.1		
2.2	Sentences 2.2	2-2.sen
2.3	World 2.3	2-3.wld
2.4	Sentences 2.4	2-4.sen
	World 2.4	2-4.wld
2.5	World 2.5	2-5.wld
2.19	World 2.19.x	2-19-x.wld

Note that for exercise 2.19, the x means that it should be replaced with 1,2 3, 4 or 5, if necessary.

4 Saving your exercises on diskettes

We plan on using an automatic grader for a number of the exercises you hand in for correction. It is important that you follow the instructions below very carefully, otherwise the grader will not work.

- Your diskette should be labeled in pen with your name on the outside.
- The diskette itself should also be labeled with your name using the LABEL software for the IBM diskettes, or simply writing your name on the diskette icon on the screen, for the Apple diskettes.
- Save the exercises on the diskette with the **exact** names described in the book (also see the table above). This includes spaces, capital letters, etc.
- Do not create any directories on the diskette. Save your files at the top level of the diskette.
- Be careful to save your files on the diskette, and not in the directory with the problem files.

5 Handing in the exercises

You should work in groups of two, or possibly alone or in a group of three. In that case, it suffices to hand in one diskette for the group. Be very clear to declare who is in the group. If you have been working by yourself in some of the exercises and have cooperated with somebody else in some of the exercises, hand in an individual diskette with all the exercises and state who you have been working with. **Do never copy solution files from anybody you have not explicitly declared you have been working with!** Notice that all exercises that should be handed in on paper (none in this module) should be solved and handed in individually unless otherwise stated.

You can hand in your exercises either to us (Lars and Marcus) personally or in our boxes (sw. "fack") at the G-house, ground floor.

6 Deadlines

You should hand in your exercises latest by

- 10am on monday, February 15, 1999.

We in turn will try to have the graded exercises back to you by

- Wednesday, February 17, 1999.

If you hand in your lab on monday morning, please do so before the lecture starts. In that case, hand it in directly to Marcus (1st floor, house G) or in his box (ground floor, house G) if you are in group A, and to Lars if you are in group B.

Exercises handed in after this date can at best get a grade of *Godkänd*, providing they are done correctly. Late arrivals will also determine whether additional oral examinations are necessary at the end of the course. The intention with the deadlines is to give you direct feedback, not to make things difficult for you!

7 Grading

You can get *Väl godkänd* (for none or just one or two minor errors), *Godkänd*, or *Kompletteras*. In the latter case, you correct your errors, hand in your diskette again (with all the solution files of the lab, and not just the ones that have been corrected), and eventually get a *G* as mark on the lab. Your marks on the labs and lecture exercises will decide your final marks: if you get *VG* at all but at most two occasions, you will get a *VG* as final mark. There will also be an opportunity to have an oral exam if you are close to a *VG* and want to improve your mark. To get a *G*, you have to get at least a *G* on all the labs and exercises, and complete the discrete mathematics part.

For foreign students: *VG* means "passed with distinction", *G* means "passed" and *Kompletteras* means "needs to be complemented".

Good luck!