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March 15, 1996
HKGAB4 - Lab 5-6

Linköping University
IDA
CogSci Line

Lab 5-6 : Conditionals and Biconditionals

1 Goal

The goal of these labs is to continue studying connectives in propositional logic. In particular, we focus on

- extending our language to include the material conditional and biconditional connectives.
- Studying several new methods of proof, in particular, conditional proof.

2 Preparation

The following should be done before the actual lab session:

- Read Chapter 4.
- Prepare as much as possible for the problems below. For example, if some involve translation, do the translations ahead of time.

3 Lab Exercises

The following lab exercises 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)
4.2		
4.3	Sentences 4.3	4-3.sen
4.4	Sentences 4.4	4-4.sen
4.5	World 4.5	4-5.wld
4.6		
4.7	World 4.7	4-7.wld
4.8	Sentences 4.8	4-8.sen
4.19	World 4.19	4-19.wld

In addition, do the written exercises 4.16, 4.18, **and** 4.20 **and hand them in on paper.**

4 Deadlines

You may work in pairs or threes, but each student should hand in his or her diskette individually by

- Monday, April 1, 1996.

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

- Wednesday, April 3, 1996.

Exercises handed in after this date can at best get a grade of *Godkänd*, providing they are done correctly.

5 In Preparation for Hyperproof

During week 14, we will begin using the Hyperproof software after a brief introduction. The software will mainly be used to do natural deduction proofs in system $\mathcal{F}$. Those of you that have some spare time, or those of you that do not, but want to prevent a lot of stress in the following weeks, should try to prepare for the following exercises by first doing them on paper.

Chap. 2: Exercises 21-25.

Chap. 3: Exercises 39-47, 49-50, 55.

Chap. 4: Exercises 23-26, 29.