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HKGAB4 - Lab 7-8

Lab 7-8 : Hyperproof Introduction

1 Goal

The goal of these labs is to introduce the Hyperproof book and software. In particular, we focus on

- Exercises to familiarize you with those parts of the software relevant for completing the exercises in the rest of the course.
- Doing formal proofs in Fitch's natural deduction system via the use of the Hyperproof software.

2 Preparation

The following is recommended to do before the actual lab session:

- Read Chapters 1-2 in Hyperproof and the appendices where needed.
- You can also prepare the formal proofs for the LFOL exercises below on paper, or at least sketch them:

  LFOL, Chap. 2: Exercises 21-25.

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

  LFOL, Chap. 4: Exercises 23-26, 29.

3 Lab Exercises

The following lab exercises are obligatory and divided into two parts. The first part consists of the "You Try Me" exercises in Chapters 1 and 2 of Hyperproof. The intention of these exercises is to familiarize you with the software environment used in Hyperproof. Do all these exercises, but you are not required to hand in any of the files.

The second part consists of the following exercises from Hyperproof, Chapter 2.

Exercise	SaveAs (Apple)
2.2	Proof 2.02 Solution
2.3	Proof 2.03 Solution
2.4	Proof 2.04 Solution
2.5	Proof 2.05 Solution
2.6	Proof 2.06 Solution
2.9	Proof 2.09 Solution
2.12	Proof 2.12 Solution

In addition, do the following exercises from LoFOL in Hyperproof. The problem files are in the Hyperproof folder LoFOL. To do the problem, simply click on the problem file. It will be loaded and the file name under which you should save the solution will automatically be set up. When you have finished the exercise, simply click on "Save" in the "Arkiv" menu, and the file will be given the correct name. You might however have to change the folder, which can be done in the dialog that appears after clicking on "Save". These exercises are obligatory and should be handed in.

Exercise	
LoFOL 2.21-23	-
LoFOL 3.39-44	-
LoFOL 3.46-47	-
LoFOL 3.49	-
LoFOL 3.55	-
LoFOL 4.23-25	-
LoFOL 4.29	-

4 Deadlines

Each group/student should hand in his or her diskett with solutions by

- Monday, March 9, 1998.

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

- Thursday, March 11, 1998.

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