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**HKGAB4 - Lab 11-12**

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# Lab 11-12 : Quantification II

## 1 Goal

The goal of these labs is to continue practice with quantification. In particular, we focus on

- Translating to and from Natural Language Sentences.
- Informal and Formal Proof Theory for the Quantifiers, including mixed quantifiers.

## 2 Preparation

The following should be done before the actual lab session:

- Read Chapter 6 in LFOL.
- The following LFOL exercises can be prepared ahead of time:

  **LFOL, Chap. 6:** Exercises 6-8, 18, 38-41, 45-48.

## 3 Lab Exercises

The following lab exercises are obligatory and should be handed in unless explicitly stated otherwise.

| **Exercise** | **SaveAs (Apple)** | **SaveAs (IBM)** |
|---|---|---|
| 6.1 | Do not hand in. | |
| 6.2, 6.3 | World 6.x | 6-x.wld |
| 6.5 | Do not hand in. | |
| 6.6, 6.7, 6.8 | World 6.x | 6-x.wld |
| 6.10 | Do not hand in. | |
| 6.11, 6.14, 6.15 | World 6.x | 6-x.wld |
| 6.16 | Sentences 6.16 | 6-16.sen |
| 6.17 | World 6.17 | 6-17.wld |
| 6.18 | Sentences 6.18 | 6-18.sen |
| 6.38, 6.39, 6.40, 6.41 | World 6.x | 6-x.wld |
| 6.50 | World 6.50 | 6-50.wld |
| 6.51 | Sentences 6.51 | 6-51.sen |

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. These exercises are obligatory and should be handed in.

| **Exercise** | |
|---|---|
| LoFOL 6.45-48 | - |

# 4 Deadlines

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

- Friday, May 3, 1996.

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

- Monday, May 7, 1996.

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