**Computational Learning Theory** 

Lecture 2: November 5

Lecturer: Yishay Mansour

## 2.1 Some theorems and stuff

We now delve right into the proof.

Lemma 2.1 This is the first lemma of the lecture.
Proof: The proof is by induction on ...
Theorem 2.2 This is the first theorem.
Proof: This is the proof of the first theorem theorem.

### 2.1.1 A few items of note

Here is an itemized list:

- this is the first item
- this is the second item

#### 2.1.2 A few more items

Here is an enumerated list:

- 1. this is the first item
- 2. this is the second item

### 2.2 Next topic

We are now ready for a major definition.

**Definition** This is the definition of *myword*.

Corollary 2.3 This is a corollary following from the definition of myword.

Sometimes we define terms in the middle of a paragraph. This is a *different term* being defined. Wasn't that easy?

On to the next page:

Scribe: Itzi Rozenscriber

Fall Semester, 1992/3



Figure 2.1: This is my picture.

This can be seen in Figure 2.1. Note that latex actually places this text *before* the figure, even though it appears after the figure in the .tex file.

Figure 2.2: This is a new picture.

```
\begin{aligned} & \text{FULL}_{i}(h), h \in \{1...n-1\} \\ & \text{begin} \\ & \text{if NUMV}_{i}(\ell_{max}, h) \geq n-h \\ & \text{then return } (true) \\ & \text{else return } (false) \\ & \text{end FULL} \\ \\ & \text{MAKELABEL}_{i} \\ & \text{begin} \\ & \text{if } i \neq i_{max} \\ & \text{then } h' := \text{minimum } h \text{ such that } \text{FULL}(h) = true \\ & x_{i} := \text{NEXTLABEL}(\ell_{max}, h') \\ & \text{end MAKELABEL}_{i} \end{aligned}
```

Figure 2.3: Code for  $MAKELABEL_i$  of BCTSS

# 2.3 Exercises

- 1. Kama-kama yatzaa Hapoel Beer-Sheva mul Makabee Tel-Aviv be-onat 82?
- \*2. Tanin hu yoter aroch o yoter yarok?
- \*3. Ma shem hamishpacha shel ha-denni sh-amar: " $2B \lor \neg 2B$ ".