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:
This can be seen in Figure 2.1. Note that latex actually places this text \textit{before} the figure, even though it appears after the figure in the \texttt{.tex} file.
2.3. EXERCISES

\[
\text{FULL}_i(h), \ h \in \{1 \ldots n - 1\} \\
\text{begin} \\
\text{if NUMV}_i(\ell_{max}, h) \geq n - h \\
\text{then return } (\text{true}) \\
\text{else return } (\text{false}) \\
\text{end FULL} \\
\]

\[
\text{MAKELABEL}_i \\
\text{begin} \\
\text{if } i \neq i_{max} \\
\text{then } h' := \text{minimum } h \text{ such that } \text{FULL}(h) = \text{true} \\
\text{end \ MAKELABEL}_i \\
\]

Figure 2.3: Code for MAKELABEL\textsubscript{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: “\(2B \lor \neg2B\)".