## 1 Syntax

```
A-Z: variables;

!\varphi: negation;

\varphi \& \psi: conjunction;

\varphi | \psi: disjunction;

\varphi - > \psi: implication;
```

All binary operators are right-associative, order can be changed using parentheses.

## 2 Usage

## 2.1 deduction.ml

Input file: deduction input.txt

Input file should contain proof that uses assumptions, each expression on a single line, the last line should contain a list of assumptions separated by ',' and the last part of expression after ':-'

Output file: deduction\_output.txt Contains a full proof of given expression without assumptions.

## 2.2 main.ml

Input file: completeness\_input.txt Should contain a single line with a true expression.

Output file: completeness\_output.txt Contains a full proof of given expression.