

## 1 Project Description

Consider the grammar of “mini-language”, provided in file “grammar.txt”, and implement a top-down, predictive, recursive descent parser for it.

The parser should take an input file from the command line. Then it should return true if the input is correct syntactically according to “grammar.txt”.

As soon as a syntax error is encountered the parser should stop (terminate execution) and return the position of the error.

### 1.1 Optional

1. You can generate an abstract syntax tree as part of the output for extra 20 points.
2. You can provide complete error diagnostics for extra 10 points.

### 1.2 What to submit?

You should submit the entire source code, as well as instructions on how to run your code.

### 1.3 Test cases

- The parser should return true for “ab.txt”, “ab2.txt”, “ab3.txt”, “hiding.txt”, “euclid.txt”, “if.txt” and “print.txt”.
- The parser should return false for “if2.txt” and “nonsense.txt”.