Homework 2   (10 points)

Context-free grammars

1. Extend your lexical analyser with nested Modula-2 comments (see the lexical analysis lecture) as follows:

    a. Use start conditions to recognise the Modula-2 comments;   **(3 points)**
    b. Count the total number of comments;   **(1 point)**
    c. Calculate the maximum nested comment level in the program.   **(1 point)**

2. Write a context-free grammar for the Mini-Pascal language in the BNF form, based on the `sample.pas` program.   **(5 points)**