BCSE III – Compiler Design Lab

Assignment V, Project - 9

Consider a simple PASCAL-like language with the following structure:

program {name of the program}
uses {comma delimited names of libraries you use}
const {global constant declaration block}
var {global variable declaration block}

function {function declarations, if any}
{ local variables }
begin
...
end;

begin { main program block starts}
...
end. { the end of main program block }

Type declaration can be done as:
type-identifier-1, type-identfier-2 = type-specifier;
Data Types : integer and real
Input, output statements are in the form **get x** and **put x**
Conditional statement of the form **expression ? expression : expression** is supported
Relational operators supported {>, <, >=, <=}
Arithmetic operators supported are {+, -, *}

Part I – Construct a CFG for this language.
Part II – Write lexical analyser to scan the stream of characters from a program written in the above language and generate stream of tokens.
Part III – Write a top-down parser for this language.