

Pascal Scanner

The purpose of this assignment is to give you practice writing a scanner for Pascal.

Start with the Scanner and Token classes in the [SimpleScanner](#) project that we saw in class.

Modify the classes to handle the following Pascal reserved word tokens:

```
PROGRAM BEGIN END REPEAT UNTIL WRITE WRITELN DIV MOD  
AND OR NOT CONST TYPE VAR PROCEDURE FUNCTION  
WHILE DO FOR TO DOWNT0 IF THEN ELSE CASE OF
```

Handle the following Pascal special symbol tokens:

```
. , : := ; + - * / ( )  
= <> < <= > >= .. ' [ ] ^
```

Also recognize these tokens:

```
IDENTIFIER INTEGER REAL CHARACTER STRING END_OF_FILE ERROR
```

You can make any modifications that you deem necessary to the other classes. For a more complete list of Pascal tokens, see the [syntax diagrams](#).

Comments

Your scanner should treat each comment as it would treat a blank – comments should be ignored. Pascal comments are enclosed in curly braces { and }.

Strings and character literals

A literal Pascal string is enclosed in single quotes. If a single quote character is part of a string, it is represented by two consecutive single quotes. For example, 'It's' contains the characters It's. It is possible to have the empty string: ''

Test Files

You may test your code on the test input files in resources directory of the Java project, using the command line or the unit tests provided.

Submission

- ✓ Check in your working code to your [YU GitHub](#) repository in your **Compilers** branch.
- ✓ The project (.pom file) should be rooted in the **/hw2-scanner** directory.