Compiler: Pascal to MIPS assembly.

User Documentation

To use the compiler you need to first obtain the source, most likely you have obtained this documentation along with the source and jar executable. To install the jar file, you can add a path to the computer, or you can just call the Pascal2Mips.jar file from the command line or terminal. The jar files can be either used in developer mode, which waits for 100,000 milliseconds, before resuming normal behavior.

How To Run

The first argument is the file location. The second argument is the file name of the output file. Also you can add -d as the third argument to go into developer mode.

Example

*Terminal: java -jar Pascal2Mips.jar /home/fonzi/Desktop/MainTestFile.txt outFileName -d*

This command would enter devMode as noted in the run environment. If you take the “-d” argument you will run in normal mode.

If you input something like :

*program test;*

*var a: real;*

*var b: real;*

*var c: real;*

*begin*

*a:= 1;*

*b:= 2;*

*c:= a+b*

*end*

*.*

The output would be file would be :

*.data*

*.text*

*main:*

*nullsw $s0, answer*

*addi $v0, 10*

*syscall*

Of course this is not a runnable MIPS file. But you can see the syntax tree of the program it would something like this.

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*THIS IS THE SYNTAX TREE*

*--------------------*

*Program ID*

*|-- Declarations [a]*

*|-- --- Declarations [b]*

*|-- --- --- Declarations [c]*

*|-- Compound Statement*

*|-- --- AssignmentStatement*

*|-- --- --- Value a*

*|-- --- --- Value 1*

*|-- --- AssignmentStatement*

*|-- --- --- Value b*

*|-- --- --- Value 2*

*|-- --- AssignmentStatement*

*|-- --- --- Value c*

*|-- --- --- Operations PLUS*

*|-- --- --- --- Value a*

*|-- --- --- --- Value b*

Along with the Variable Hashtable, and the scanner input.

Errors: If you have a wrong token and the parser cannot parse it, or it is in incorrect format, the compiler will stop with an an error. No extra message. The only debbugable information is where the parser will stop for the pascal input.