Language Processors Lab 1

Note: Read this through *before* logging in.

The goal for this weeks lab is to see the Straightline programming language interpreter working and to add the `maxargs(Stm s)` function to it.

Running the Straightline interpreter

Fire up a Unix shell window. To get the environment ready type the command:

```
module add java soi
```

Move to the directory in which you want to do your IN2009 work and copy the Straightline program directory with the command:

```
cp -R /soi/sw/courses/daveb/IN2009/straightline .
```

This makes a complete copy of my straightline interpreter program. You can see it with:

```
cd straightline
ls
```

Note: All the directories in `/soi/sw/courses/daveb/IN2009` are available through CitySpace/WebCT, as single files, or as zipped folder (directory) hierarchies, so you can download them from there instead of copying them if you wish.

Now compile the program with:

```
javac *.java
```

And then run the program with:

```
java interp
```

The interpreter output for the program given in Appel will be printed. There are other programs in file `prog.java`; modify `interp.java` to run some of these instead of `prog` (eg `prog2`).

Modifying the interpreter

Work out how to write the `maxargs(Stm s)` function (the `length()` function already defined in `interp.java` will be useful). You will need several functions to do the count for each abstract syntax type (see the implementation of `interp()`).

Edit the file `interp.java` to include your implementation of `maxargs()`, and then test your implementation by recompilation and running.