

Programming in LispWorks

In LispWorks, the Listener functions as the command-line, where you will run your compiled programs. To write and edit code, use the Editor window (open a new editor from the File menu) or any text editor.

Writing Your First LISP Program:

1. In LispWorks, open a new editor window and type the follow piece of code:

```
(defun hello ()  
(print "hello world")  
)
```

It may be obvious in this case, but when programming in LISP, make sure to close all parentheses! Do not put semi-colons at the end of lines. A semi-colon that precedes a string makes it a comment:

```
;this is a comment
```

2. Save your one-function LISP program as hello.lisp

3. From the File menu, select Compile and Load. This compiles your program and then enables you to call its functions from the Listener window.

4. In the Listener, type the follow line:

```
(hello)
```

You should see the following lines on the screen:

```
"hello world"  
"hello world"
```

It prints twice because the string is printed once in the function, and then returned to the caller. As Professor Stolfo explained in class, at the end of every LISP program's execution, the last thing to be returned is then printed to screen.

5. Once your program has already been written and saved, to run it in LispWorks simply Compile and Load, and then call the functions from the Listener prompt. In other words, if you are not editing your code you don't need to open it in LispWorks.

NOTE: As you begin to program your homework assignments, and especially when you begin to create recursive functions, make sure to save your work often! LispWorks is notorious for crashing while executing recursive statements.