

```
1 import java.io.*;
2 import java_cup.runtime.*;
3
4 /**
5 *
6 * Simplified test program for CSC 330 Assignment 4. This does what the full
7 * EjayInterpreterTest class does, but instead of constructing a parse tree for
8 * a call to the main method, it calls EjayInterpreter.eval on the statements
9 * part of the body of main method. In doing things this way, this simplified
10 * test program can test a version of the interpreter that does not have
11 * function calls implemented, but does do statements and expressions.
12 *
13 * This test program also dumps the parse tree and symbol table, prior to
14 * dumping the interpreter's execution memory.
15 *
16 */
17 public class EjayInterpreterNoFuncsTest {
18
19     /**
20      * See the class comment for documentation.
21      */
22     public static void main(String[] args) {
23         TreeNode tree;
24         SymbolTable symtab;
25         try {
26             EjayParser parser = new EjayParser(
27                 new EjayLexer(new FileReader(args[0])));
28
29             parser.initSymbolTable(500);
30             tree = (TreeNode) parser.parse().value;
31             System.out.println(tree);
32             System.out.println();
33             System.out.println(symtab = parser.getSymbolTable());
34
35             EjayInterpreter interp =
36                 new EjayInterpreter(symtab.memorySize, 10000);
37             interp.eval(grabMainBody(symtab), symtab);
38             interp.dumpMemory();
39         }
40         catch (Exception e) {
41             System.out.println("Exception " + e);
42             e.printStackTrace();
43         }
44     }
45
46     /**
47      * Extract the executable statements list from the body of the main
48      * method.
49      */
50     protected static TreeNode grabMainBody(SymbolTable symtab) {
51         FunctionEntry entry = (FunctionEntry) symtab.lookup("main");
52         TreeNode2 body = (TreeNode2) entry.body;
53         TreeNode stmts = body.child2;
54         return stmts;
55     }
56 }
```