

## CSE 3302 Lab Assignment 4

Due August 6, 2014

### Goals:

Further understanding of JavaScript and elementary compiler/interpreter concepts.

### Requirements:

1. Extend a lab 2 solution with the capability of accessing the cursor position in a canvas to PL/0:
  - a. Two built-in variables, `cvx` and `cvy`, should be available to PL/0 programs.
  - b. `mousemove` events over the canvas will change `cvx` and `cvy`.
  - c. `mouseout` events should set both `cvx` and `cvy` to `-999999`.
2. In addition, you should also extend PL/0 with C-like arrays:
  - a. An array may be included in a `var` declaration as `arrayName { arrayLength }` where `arrayLength` is either a number or a previously declared constant. The legal subscripts for this array will be in the range `[ 0, arrayLength )`.
  - b. Both the compiler and interpreter will need changes
3. Email your *zipped* files to `sourabh.bose@mavs.uta.edu` by 12:45 p.m. on August 6. MavMail will block a number of file types/extensions, including `.js`. The body of your message should indicate the browser(s) you tested with.

### Getting Started:

1. Useful files, including my solution to lab 2, are at: <http://ranger.uta.edu/~weems/NOTES3302/LAB4SUM14/>
2. PL/0 code lacking suitable calls to `wait` or not checking for `mouseout` situations will cause problems for the interpreter.
3. Be sure to document the base code you are using.