CSE526: Principles of Programming Languages (Spring 2003)
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hw7 (version 11:00, 14apr2003), due at 16:30 on 17 Apr 2003

Please submit a printout of your hw7 (slide it under my office door) any time this week before the due date. If that would be inconvenient for you, email your hw7 to me in PDF or PostScript format.

Problem 1

Exercise 11.5. You only need to derive the evaluation rules for **listcase**. You do not need to derive evaluation rules for **nil** and "::".

Problem 2

Exercise 11.7.

Problem 3

Exercise 13.2.

Problem 4

Consider extending the language of chapter 13 with an expression "**free** $\langle exp \rangle$". If e evaluates to a reference r, then **free** e de-allocates r (if r has not already been de-allocated) and returns a zero-tuple (i.e., $\langle \rangle$); otherwise, **free** e is stuck. De-allocation of a reference is modeled by removing the reference from the domain of the state. An attempt to access a de-allocated reference causes a program to get stuck.

Give evaluation rule(s) for **free** and (if necessary) modified evaluation rules for other kinds of expressions.