CSCE 330 Fall 2001

Homework 7—Correction Guide

Assigned Wednesday, 01/11/14. Due Monday, 01/11/26

Do exercises 2.1.2, 2.2.2, 2.4.1, 2.4.3, 2.4.4, 2.4.5 in Ullman's text.

Answer: 2.1.2a. Integer division is div, not \.
b. Missing else
c. andalso must be used in place of and
d. DIV must be lower case
e. 4. should be 4.0
f. orselse must be used in place of or
g. one may only concatenate strings, not characters.
h. the period at the end.
i. real is not an equality type.

2.2.2a. ceil needs a real argument (ceil(4.0))
b. the types of the then and else expressions must be the same: else 7
c. the domain of chr is 0-255
d. see c.
e. the domain of ord is char: `ord(#"3")`
f. see c.
g. the condition of if must be a boolean: if false then 1 else 2
h. "a" is not a char: `ord(#"a")`

2.4.1a. 4
b. 3
c. `[4,5]`
d. `[#"f", #"o", #"o"]`
e. "foo"
f. `["c","a","t"]`
g. `["c","o","b","o","l"]`
h. "cat"

2.4.3a real * (string * int list)
b. int list list
c. (int * real) list
d. char list * int list list

2.4.4 No. Yes.

2.4.5a `[[[1,2][3,4]], [[1],[2,3][4,5]]]`
b. `[(1, #"g"), (3, #"4")]`
c. `(["foo", "bar"], (3, (5.0, "foo")), 2)`
d. `((3, 2), ([false, true, true, false], 6.4), (3.5, "bar"))`
e. `((true, 10), #"t")`
f. `(12.5, [[[[4,16],[2,4]],[[3,4],nil]]]]`