Corrections to the Second Edition of the Icon Programming Language Book

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There are a few mistakes and omissions in the second edition of The Icon Programming Language. These will be corrected when there’s another printing, but if you have an early printing, you may wish to note the following changes.

Line number counts include section headings and program material, but not running heads, page numbers, ellipses, or diagrams.

Page 15, line 9: Replace “the entire expressions” by “the entire expression”.
Page 24, line 6: Replace “produces the value of its left argument” by “produces the value of its right argument”.
Page 30, line –12: Replace “fine(s, line)” by “find(s, line)”.
Page 37, line 9: Replace “depends on the initial character” by “depends on the character at the current position”.
Page 58: Delete Exercise 4.17 (which cannot be done reasonably with material presented to this point) and renumber Exercise 4.18 to 4.17.
Page 68, line 7: Add a line with a brace after this line.
Page 69, line 6: Replace “which assigns the list” by “which assigns a new list”.
Page 85: After line 12, add:

\[ \text{repeat } \text{expr} \]

Page 103, line 1: Replace "proc(*, 2)" by "proc(" *, 2)."
Page 115, line –8: Replace “[knuth coroutines, marlin coroutines, scoexp.]” by “References 5, 6, and 9”.
Page 126, line –10: Replace

\[ L === L \]

by

\[ L1 := L \]
\[ L === L1 \]

Page 129: Add the following paragraph to the end of the text, before the exercises:

The image of an integer that has more than approximately 25 digits is given showing the approximate number of digits, as in "integer(~100)".

Page 138, line –5: Replace “copies a binary file from standard input to standard output” by “copies binary data from one named file to another named file”.

Page 147, line 14: Replace “described later in this chapter” by “described in Appendix E”.

Page 153: After line 3 add:

```
trace.ion 5 | main; co-expression_3 returned "A" to co-expression_1
```

Page 175, line –8: Replace “lassoc(,+ – | "s")” by “lassoc(exp,+, – | "s")”.
Page 179, line 13: Replace “upto” by "upto and including".
Page 190, line –3: Replace “s” by “/”.

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Page 234, line –14: Replace “xdd” by “xdd”.
Page 249, line 9: Replace “abs(N) : N” by “abs(N1) : N2”.
Page 249, line 10: Replace “abs(N) produces the absolute value of N” by “abs(N1) produces the absolute value of N1”.
Page 253, line 1: Replace “remove tabs” by “replace tabs by blanks”.
Page 254, line 1: Replace “insert tabs” by “replace blanks by tabs”.
Page 259, line 10: Replace “x if x” by “if x”.
Page 266, line 5: Replace “sort list or table” by “sort list, set, or table”.
Page 270, line 1: Replace “=s1 : s2” by “=s : s”.
Page 270, line 2: Replace “=s1 is equivalent to tab(match(s1))” by “=s is equivalent to tab(match(s))”.
Page 270, lines –7 - –6: Replace

If x1 is a list, table, or record, ?x1 produces a randomly selected element, which is a variable, from x1.

by

If x1 is a list or record, ?x1 produces a randomly selected element, which is a variable, from x1.
If x1 is a table, ?x1 produces the value of a randomly selected element of x1.

Page 271, lines 5 - 7: Replace

If x1 is a list, table, or record, !x1 generates the elements, which are variables, of x1. For lists and records, the order of generation is from the beginning to the end, but for tables it is unpredictable.

by

If x1 is a list or record, !x1 generates the elements, which are variables, of x1. The order of generation is from the beginning to the end.
If x1 is a table, !x1 generates the values of the elements of x1 in no predictable order.

Page 279, line 10: Replace “[i1–:i2]” by “x[i1–:i2]”.
Page 281: Replace “&cset” by “&cset”.
Page 287: Add i1 to i2 by i3 to the list of generators at the bottom of the page.
Page 291, After line 13 add

316 interpreter stack too large
318 co-expression stack too large

Page 328, line 6: Replace “star(string(&lcase))” by “astar(string(&lcase))”.
Page 332, lines –10 - –8: Replace

procedure star(s)
  suspend "" | (star(s) || ls)
end

by

procedure astar(s)
  suspend ls | (astar(s) || ls)
end

Last page, after index, line 13: Replace “4049” by “8448”.
Last page, after index: Delete lines –1 - –5.