

ERRORS IN HACKER'S DELIGHT

Sixth and later printings

P. 4 line 14: Append a semicolon in the “code” font, so that the line is

`do statement while (expression) ;`

P. 18 lines 17-18: Replace the sentence “Assuming the machine has mod 64 shifts, the first four formulas hold for $0 \leq n \leq 31$, and the last holds for $0 \leq n \leq 63$.” to “These formulas hold for $0 \leq n \leq 31$ and, if the machine has mod 64 shifts, the last holds for $0 \leq n \leq 63$.”

P. 75: The last line of the second paragraph should read “own inverse, $y_i \oplus y_j$ is the parity of bits $i - 1$ through j of x , for $i \geq j$.”

—Michael Pyne

P. 141 line 25: The comment should be `// 0 <= s <= 15`.

P. 151 line 26: “u32” should be “un32”.

P. 183, second displayed formula, change the second \leq to $<$, so that it becomes

$$2 \leq m < 2^W + 2.$$

—Jeff Gros

P. 186 line 4: Change “less than 100” to “less than or equal to 100”.

P. 212 Figure 11–5, replace the entire code with the code shown below. This is necessary to make the remarks about a 64-bit version be correct.

```
int icbrt(unsigned x) {
    int s;
    unsigned y, b;

    y = 0;
    for (s = 30; s >= 0; s = s - 3) {
        y = 2*y;
        b = (3*y*(y + 1) + 1) << s;
        if (x >= b) {
            x = x - b;
            y = y + 1;
        }
    }
    return y;
}
```

P. 284 line 10, change “integer ≥ 3 ” to “real number ≥ 2.106 ”.

P. 305: Just before the index entry for space-filling curves, insert the entry “snoob, 14”.

Non-substantive errors (typographical etc.)

P. 4 lines 8, 14, and 18: The left and right parentheses, and the semicolons in line 18, should be in the “code” font (same font as the words `while` and `for`).

P. 68 line 10: The right part of the line, “// Add 6-bit sums.” should be moved to the right to line up with similar comments above.

P. 68 line 13: The period after “multiple of 3)” should be before the parenthesis.

P. 101 paragraph 3: Replace the phrase “A small improvement results on most machines ...” with “A small improvement may result on some machines”

P. 266, 5th line below the figure: change “inverse” to “reciprocal”.

P. 279-281: Several displayed formulas are clipped at the top and/or bottom. These errors are new with the sixth printing, I believe. The formulas are: p. 279 in list item 5; p. 280 in list items 2 and 4 and below the paragraph that begins “We can now explain ...”; and p. 281 in list items 11, 12, and 22.