# Errata in the Exercises

*An Introduction to Data Structures and Algorithms*

J. A. Storer, Birkhäuser / Springer

**#3, Solution A:** $c \le 1/100$ should be $c \le 100$.

**#4, Solution F:** $\log_2(n)$ and $n^{1/2}$ cross at $n$=2 and $n$=4, and then not again; so $a$=4, $b$=1 suffices. Without calculus, since $\log_2(x) < x$, $n\log_2(n)^2 = n(2\log_2(n^{1/2}))^2 < 4n(n^{1/2})^2 = 4n^2$ and $a$=1, $b$=4 suffices.

**#4, Solution G:** Although this is true, $b = 1$ suffices.

**#23:** The *repeat* loop should go until *flag*=0.

**#58b:** "became half" should be "became a quarter".

**#89:** In Part E $i$ should be $n$, in Part J "$(1/5)x^5$+L" should be "$(1/5)x^5$–...", and in the last three bullets of Part J there is a missing exponent of $n$ in the second term, and by using this second term, the last bullet can be $b(n) > 0.7n + \log_2(n) + 2.4$, and so $L(n) < n$ for sufficiently large $n$.

**#92a,b:** $h$ should be initialized to 0 if $v$ is a leaf or $\infty$ otherwise

**#120b:** Count only comparisons with $A[i]$, and "twice" should be "2.5 times".

**#138:** $W[n+2]$ should be $W[m+2]$.

**#139b:** "$\alpha(i,j)$ can be computed from $\alpha(i+1,j)$" should be "$\alpha(i,j+1)$ can be computed from $\alpha(i,j)$".

**#183:** The root may have between 2 and $J$ children; in part a, "K and J vertices" should be "K and J children".

**#202:** The inverse of $f$ should be $f^{-1}$, not $f^{1}$.

**#219:** Portions of lines of the left Kuratowski graph are missing (it is a clique of size 5); also, this problem assumes that the graph is connected and has no self-loops.

**#222:** It's ok for two lines to cross at a point even if original graph is planar, $O(n(\log(n)^2)$ should be $O(n(\log(n)^2))$, the area is 30 not 42 (6 high by 5 wide), "an" should be "and" in the hint.

**#228, in the *for* loop:** "DFS should be non-recursiveDFS".

**#246b:** Assume all vertex names and *edge weights* use log(n) bits.

**#301:** On the last line, the three +'s should be ='s.