

Analysis of Algorithms: An Active Learning Approach

Second Edition Errata¹

Errors in the second printing:

Page 42, exercise 13

The word “relation” should be “relations”

Page 151, last line of text

“... the words of language Σ^* ” should be “... the words of Σ^* ”

Page 166, exercise 1

The edge from state 5 to state 1 should be labeled with an a symbol.

Page 223, second line of algorithm

The comment beginning “// the link array ...” should be removed.

Page 277, third last line of page

If implemented in a language that will only evaluate the end value for the loop once, this algorithm works fine. To be correct for all possible languages, change “(lg count)” to “(lg (N/2))” on this line.

Errors in the first printing:

Page 42, exercise 13

The word “relation” should be “relations”

Page 55, rank permutation algorithm

list[size] should be initialized to 1 (on the first line) and the three references to list[i-1] in the if statement should be list[i] (on the seventh and eighth lines). The full corrected algorithm is:

```
list[size] = 1
for j = 1 to size - 1 do
  d = (rank mod f[j + 1]) / f[j]
  rank = rank - d * f[j]
  list[size - j] = d+1
  for i = size - j + 1 to size do
    if list[i] > d then
      list[i] = list[i] + 1
    end if
  end for
end for
```

Page 151, last line of text

“... the words of language L_3 ” should be “... the words of Σ^* ”

Page 151, figure 6.1 caption

The caption should read “The lexical ordering of Σ^* ”

Page 166, exercise 1

The edge from state 5 to state 1 should be labeled with an a symbol.

Page 175, line 5 of the third full paragraph

The “ $s \in X$ ” should be a subscript. The equation should be:

$$\Delta(X, a) = \bigcup_{s \in X} \delta(s, a)$$

¹ The printing is indicated by the smallest number on the last line of the copyright page.

Page 200, exercise 9

The second rule should be $S \rightarrow aB$ instead of $S \rightarrow AB$.

Page 210, exercise 6

Exercise 6 should read “Give the parse tree for Exercise 5b in Section 6.1.3.”

Page 210, exercise 7

Exercise 7 should read “Give the parse tree for Exercise 5c in Section 6.1.3.”

Page 223, second line of algorithm

The comment beginning “// the link array ...” should be removed.

Page 277, third last line of page

If implemented in a language that will only evaluate the end value for the loop once, this algorithm works fine.
To be correct for all possible languages, change “(lg count)” to “(lg (N/2))” on this line.

Page 314, exercise 1b

The “L” on the last line should be “R”.

Page 367, figure 11.5

The node labeled “4, 4” should be lowered to align with the other nodes on the bottom level.