

A bug in my book!

On page 191, at the end of Chapter 24 of "A Discipline of Programming" (Prentice-Hall, 1976) the following Note should be added:

Note 3. In the program as published above, Mark Bebie has found an error. In order to maintain the convention

"set(i) = 2 and set(-i) edge i is a processed edge of the clockwise boundary of the light cap"

the values of set(i) and set(-i) have to be adjusted when edge i is processed, i.e. b:hiext(i) takes places. In "extend b and refresh xx" this has been done (in the third line), in "inspect face along -xx", however, it has erroneously been omitted. Its tenth line

do b.dom = 0 → b:hiext(lumen * yy) od

should therefore be replaced by

do b.dom = 0 → b:hiext(lumen * yy);
set:(b.high)= 2; set:(-b.high)= 0
od

(End of note 3.)

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Two further corrections.

On page 159, line 21 from above

begin glocon N, to, lcr; glovar from, uvl, suv, min, h; privar len;

should be replaced by

begin glocon to, lcr; glovar from, uvl, suv, min, h; privar len;

On page 141, line 11 from above

$x^2 + y^2 \leq r$ and $x^2 + (y + 1)^2 < r$

should be replaced by

$x^2 + y^2 \leq r$ and $x^2 + (y + 1)^2 > r$