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SOLUTION of (8-2.c):

The `while`-loop computes the zero of the function  $z \mapsto f(z)$  from (8.2.2) using Newton iterations, see also (8.2.3):

$$\begin{cases} z^{(0)} &:= x - 1, \\ z^{(n+1)} &:= z^{(n)} - \frac{e^{z^{(n)}} - x}{e^{z^{(n)}}}, \quad n \geq 1 \end{cases}.$$

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