## Square Root Algorithm

> Trying to find the square root of $x$

1. Start with a guess g
2. if $g$ * $g$ is close enough to $x$ then STOP
3. else

$$
\begin{aligned}
& \# \text { a new value for guess } \\
& g=(g+x / g) / 2
\end{aligned}
$$

REPEAT (go back to 2)
one way of implementing close enough is
round $(g * g * 100)=x * 100$

