Fixed Point Iteration Method

1. Start
2. Define function $f(x)$
3. Define function $g(x)$ which is obtained from $f(x)=0$ such that $x = g(x)$ and $|g'(x)| < 1$
4. Choose initial guess b, Tolerable Error e and Maximum iteration N
5. Initialize iteration counter : $i = 1$
6. Calculate $m = g(b)$
7. Increament iteration counter : $i = i+1$
8. If $i > N$ then print "Not convergent" and goto (12) otherwise goto (10)
9. Set $b = m$ for next iteration
10. If $|f(m)| > e$ then goto step 6 otherwise goto step (11)
11. Display m as root
12. Stop