

# Algorithm: Bisection Method

- Read a, b, E
- If (  $f(a)*f(b) < 0$  ) then
  - Set  $m = \frac{a+b}{2}$
  - Set  $i = 1$
  - While (  $|f(m)| > E$  ) do
    - Print i , a, b, m, f(m)
    - If (  $f(a)*f(m) > 0$  ) then
      - a = m
    - Else
      - b = m
    - End if
    - $m = \frac{a+b}{2}$
    - $i = i + 1$
  - End while
  - Print i,a, m, f(m)
- End if
- Print (Root = m)
- END