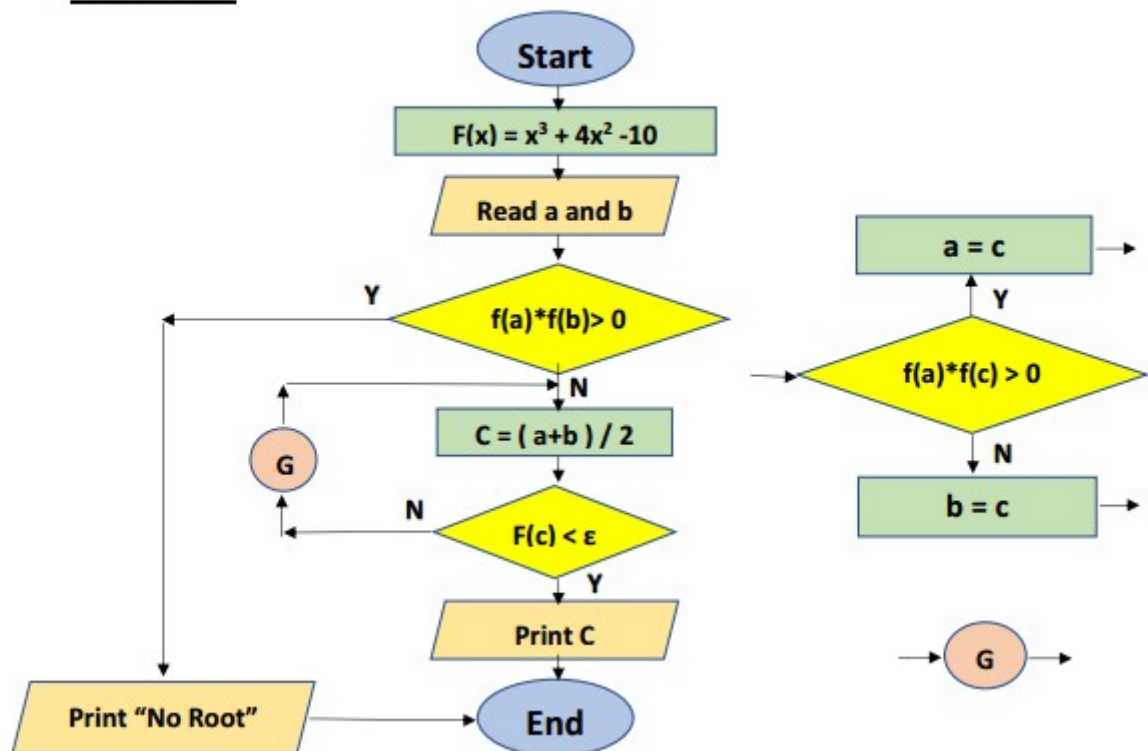


# Bisection Method

## Algorithm:

1. Set the function or the equation (  $f(x) = ax^2 + bx + c$  )
2. Set the accepting error limit (  $\epsilon$  ).
3. Take input the limits (  $a, b$  ).
4. If  $f(a) * f(b)$  is greater than 0, go to 5; else go to 6.
5. Print "There is no root within this limit, exit."
6. Repeat 7-9 till  $f(c)$  is less than error limit (  $\epsilon$  ).
7. Make  $c$  as the average of  $a$  &  $b$ .
8. If  $f(c)*f(a) < 0$ , set  $b=c$ .
9. If  $f(c)*f(b) < 0$ , set  $a= c$ .
10. Print  $c$  as the root of the equation; then exit.

## Flowchart:



## Source code:

