**Algorithm for Bisection Method**

To find a root of f(x)=0 within a prescribed tolerance say epsilon.Given values x0 and x1 such that f(x0)\*f(x1)<0,The variable m is used to store the mid point of the interval.

1. Start
2. Define function f(x)
3. Input
4. read: x0,x1,m ***//input value for x0 and x1***
5. read: epsilon ***//input the prescribed tolerance***
6. if f(x0) \* f(x1)>0

write: “Invalid guess”

goto 3

endif

1. do

set m = (x0 + x1)/2 ***//compute the mid point***

if f(x0) \* f(m)<0 then

***//select the appropriate interval***

set x1 = m

else

set x1 = m

endif

while(fabs(f(x0 – x1))>epsilon) and

f(m) is not equal to 0.

1. write: m , “as the approximate root”

***//output the computed root***

1. Stop