**Algorithm for Secant Method**

Here f(x) is the given function,x0 and x1 are two initial approximations,epsilon is the prescribed tolerance,delta is the prescribed lower bound for the slope of f(x) and n is the maximum number of iterations permitted.

1. Start
2. Define function f(x)
3. Input
4. read: x0,x1,delta,n,m
5. read: epsilon
6. set f0 = f(x0)

set f1 = f(x1)

1. for i=1 to n by 1 do

if(fabs(f1 – f0)<=delta) then

write: “slope of the function

becomes too small”

exit

endif

set m = (x0\*f1 – x1\*f0) / (f1 – f0)

set f2 = f(m)

if((fabs((x2 – x1)/m)<=epsilon)

or (f(x)=0)

write: x2, “as the

approximate root”

exit

endif

set x0 = x1

set f0 = f1

set x1 = m

set f1 = f2

endfor

1. write: “Solution does not converge

in”,n,”iterations”

1. Stop