**start function**: Input Arguments and initialize variables

initial guesses f0=0.1, f1=0.01

f\_tol = 0.01 (1 percent)

is

relErr > f\_tol

and

iter < maxIter

and

fnew >= 0

y0= difference in the Colebrook equation using f0

y1= difference in the Colebrook equation using f1

is

relErr> f\_tol

or

iter >= maxIter

or

y0 == y1

or

x2 < 0

**Cannot compute root:** return failure flag

**Found root:** return success flag and the computed root value

does y0=y1

or does x0=x1?

slope = (y1-y0)/(x1-x0)

and

x2 = x0-y0/slope

x0=x1

x1=xnew

itt = itt + 1

relErr = abs\_val((x1-x0)/x1)

yes

yes

yes

no

no

no