```matlab
clc
clear all

disp 'Masukkan Perkiraan Batas Bawah dan Batas Atas '
xa=input('batas bawah = ');
xb=input('batas atas  = ');
fa = f1(xa);
fb = f1(xb);
tol=0.000001;
xnew=(xa+xb)/2;
fm=f1(xnew);
disp('----------------------------------------------------------');
disp('    xa              xb          f(xa)           f(xb)');
disp('----------------------------------------------------------');
fprintf('   %3.6f    %3.6f    %3.6f     %3.6f
\n',xa,xb,fa,fb);

if fa*fm<0
     xold=xb;
     xb=xnew;
     fb=f1(xb);
else
     xold=xa;
     xa=xnew;
     fa=f1(xa);
end

while abs(xold-xnew)>tol
   xnew=(xa+xb)/2;
   fm=f1(xnew);

  if fa*fm<0
     xold=xb;
     xb=xnew;
     fb=f1(xb);
  else
     xold=xa;
     xa=xnew;
     fa=f1(xa);
  end

 fprintf('   %3.6f    %3.6f    %3.6f     %3.6f
\n',xa,xb,fa,fb);
end

disp('----------------------------------------------------------');
fprintf('f(x)= 0 saat x = %3.6f   \n',xnew);
```