

```

clear all; clc;
syms x y
f=x^2+y^2-1;
g=x*y;
%f=input('Enter the Function F(x,y) : ');
%g=input('Enter the Function g(x,y) : ');
arrfun=[f;g];
%x0=input('Enter the X0 : ');
%y0=input('Enter the Y0 : ');

x0=0.5;
y0=-0.1;
arrv=[x;y];
jac=jacobian(arrfun,arrv);
de=det(jac);
dee=inline(de);

for i=1:2
    disp('=====');
    J=dee(x0,y0);
    J
    ff=inline(f);
    gg=inline(g);
    fx1=inline(jac(1,1));
    fy1=inline(jac(1,2));
    gx2=inline(jac(2,1));
    gy2=inline(jac(2,2));
    F=ff(x0,y0);
    F
    G=gg(x0,y0);
    G
    arrx=[F,fy1(y0);G,gy2(x0)];
    arrx
    array=[fx1(x0),F;gx2(y0),G];
    x1=x0-(1/J)*det(arrx);
    y1=y0-(1/J)*det(array);
    x1
    y1
    x0=x1;
    y0=y1;
end

```