```c
#include<stdio.h>
#include<math.h>
float f(float x,float y);
int main()
{
float x0,x,y0,h,yc,yp,error=1.e-7;
int r=3;
x0=0.1;
x=0.5;
y0=1.1+(r/100.);
h=0.1;
yp=y0+h*f(x0,y0);
yc=y0+(h/2.)*(f(x0,y0)+f(x,yp));
while(fabs(yp-yc)>error)
{
yp=yc;
yc=y0+(h/2.)*(f(x0,y0)+f(x,yp));
}
printf("y(%4.2f)=%6.4f\n",x,yc);
printf("Correct upto 4D");
return(0);
}
float f(float x,float y)
{
float z;
z= pow(1+pow(x,3)*pow(y,3),1/3.)/pow(1+pow(x,2)*pow(y,2),1/2.);
return(z);
}
//*Output*//
y(0.50)=1.2254
Correct upto 4D
```