```c
#include<stdio.h>
#include<math.h>
float f(float x,float y);
int main()
{
 float x0,xn,y0,h,k,k1,k2,k3,k4;
 int R=3;
 x0=0;
 y0=1.1+(R/100.);
 xn=1.;
 h=0.1;
 while(x0<xn)
 {
 k1=h*f(x0,y0);
 k2=h*f(x0+h/2.0,y0+k1/2.0);
 k3=h*f(x0+h/2.0,y0+k2/2.0);
 k4=h*f(x0+h,y0+k3);
 k=(1.0/6.0)*(k1+2.0*k2+2.0*k3+k4);
 y0=y0+k;
 x0=x0+h;
 printf("y(%3.1f)=%7.5f\n",x0,y0);
 }
 printf("(correct upto 5 decimal places)");
}
float f(float x,float y)
{
 float z,p;
 int R=3;
 p=(28+R)/20.;
 z=pow(((p+x*pow(y,2)+(p-1.0)*pow(x,2)*y)/(2.0+1.3*pow(x,2)+3.1*pow(y,2))),0.5);
 return(z);
}
//*Output*//
y(0.1)=1.18134
y(0.2)=1.23354
y(0.3)=1.28686
y(0.4)=1.34151
y(0.5)=1.39767
y(0.6)=1.45547
y(0.7)=1.51502
y(0.8)=1.57641
y(0.9)=1.63970
y(1.0)=1.70491
(correct upto 5 decimal places)
```