```c
#include<stdio.h>
#include<math.h>
float f(float x);
int main()
{
    float x0,x1,x2,error=1e-7;
    printf("\n enter the initial values\n");
    scanf("%f%f",&x0,&x1);
    while(fabs(x1-x0)>error)
    {
        x2=x1-(x1-x0)*f(x1)/(f(x1)-f(x0));
        x0=x1;
        x1=x2;
    }
    printf("\n the root is %8.5f(correct upto 5D)",x0);
    return(0);
}
float f(float x)
{
    float y;
    int r=3;
    y=exp(x)+x*log(x+1)-8.2-(0.1*r);
    return(y);
}
//*Output*//
 enter the initial values
0
1

 the root is  1.87489(correct upto 5D)
```