

```

#include<stdio.h>
#include<math.h>
#define m 2
float f(float x);
float f1(float x);
int main()
{
float x,h,error=1e-7;
printf("Enter the initial value\n");
scanf("%f",&x);
h=-m*f(x)/f1(x);
while(fabs(h)>error)
{
x=x+h;
h=-m*f(x)/f1(x);
}
printf("Root =%7.5f(correct upto 5D)",x);
return(0);
}
float f(float x)
{
float y;
y=pow(x,3)-pow(x,2)-x+1;
return(y);
}
float f1(float x)
{
float y;
y=3*pow(x,2)-2*x-1;
return(y);
}
/*Output*/
Enter the initial value
0.5
Root =1.00000(correct upto 5D)

```