

```
def func(x):  
    f= pow(x,6)- x - 1.  
    return f  
  
eps=1.e-5  
a,b=1,2  
  
err=eps+1  
loop=0  
while (err >=eps):  
    loop += 1  
    if(loop > 100): break  
    fa=func(a)  
    fb=func(b)  
    c=0.5*(a+b)  
    err=abs(c-a)  
    fc=func(c)  
    print ("loop={:2d}  a={:.7f}  b={:.7f}  c={:.7f}  err={:.5e}".format(loop,a,b,c,err))  
    if(fa*fc <= 0.):  
        b=c  
    else:  
        a=c
```