```python
def NR(x):
    f=pow(x,6)-x-1
    df=6*pow(x,5)-1
    return f,df
```

```python
TOL=1.e-6
x=-10
err=1
loop=0
while( err > TOL):
    loop += 1
    if(loop > 100): break
    f0,f1=NR(x)
    err=abs(f0/f1)
    x = x - f0/f1
    print ("loop={:2d}  x={:.5f}  f={:.5f}  err={:.5e}".format(loop,x,f0,err))
```