M次方根：https://www.lanqiao.cn/problems/1542/learning 2星

不常考，因为精度问题，不大可能考。

```cpp
#include <iostream>
using namespace std;
double check(double x,double y){
    double sum=1;
    for(int i=0;i<y;i++)
        sum*=x;

    return sum;
}

int main()
{
    double x,y;
    cin >> x >> y;
    double l=0,r=10000;
    while(r-l>1e-9)
    {
        double mid=(l+r)/2;
    if(check(mid,y)>=x) r=mid;
    else l=mid;

    }
    printf("%.7lf",l);
    return 0;

}
```

```java
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.PrintWriter;
import java.util.StringTokenizer;

public class Main {
    public static void main(String[] args) {
        solve();
        out.flush();
    }
    static double N,M;
    static double eps=1e-9;
    static boolean check(double x){
      double res=1;
      for(int i=1;i<=M;i++){
          res=res*x;
      }
      return res>=N;
    }
    static void solve(){
      N=in.nextDouble();
      M=in.nextDouble();
```

```
      double l=1,r=N;
      while(l+eps<r){
        double mid=(l+r)/2;
        if(check(mid)){
          r=mid;
        }else{
          l=mid;
        }
      }
      out.printf("%.7f",l);
    }

    static FastReader in = new FastReader();
    static PrintWriter out=new PrintWriter(System.out);
    static class FastReader{
        static BufferedReader br;
        static StringTokenizer st;
        FastReader(){
            br=new BufferedReader(new InputStreamReader(System.in));
        }
        String next(){
            String str="";
            while(st==null||!st.hasMoreElements()){
                try {
                    str=br.readLine();
                } catch (IOException e) {
                    throw new RuntimeException(e);
                }
                st=new StringTokenizer(str);
            }
            return st.nextToken();
        }
        int nextInt(){
            return Integer.parseInt(next());
        }
        double nextDouble(){
            return Double.parseDouble(next());
        }
        long nextLong(){
            return Long.parseLong(next());
        }
    }
}
```

```
def check(x, y):
    result = 1.0
    for _ in range(int(y)):
        result *= x
    return result

def find_root(x, y):
    l, r = 0.0, 10000.0
    while r - l > 1e-8:
        mid = (l + r) / 2
        if check(mid, y) >= x:
            r = mid
        else:
```

```
            l = mid
    return l

if __name__ == "__main__":
    x, y = map(float, input().split())
    result = find_root(x, y)
    print(f"{result:.7f}")

```