#include<bits/stdc++.h>

using namespace std;

#define fi first

#define se second

#define mp make\_pair

#define pb push\_back

#define rep(i, a, b) for(int i = (a); i < (b); ++i)

#define per(i, a, b) for(int i = (b) - 1; i >= (a); --i)

#define sz(x) (int)x.size()

#define de(a) cout << #a << " = " << a << endl

#define dd(a) cout << #a << " = " << a << " "

#define all(a) a.begin(), a.end()

#define pw(a) (1ll<<(a))

#define endl "\n"

typedef long long ll;

typedef double db;

typedef pair<int, int> pii;

typedef vector<int> vi;

//并查集

int f[];

int Find(int x){x==f[x]?return f[x]:f[x]=Find(f[x]);}

int join(int x,int y){if(Find(x)!=Find(y))f[Find(x)]=Find(y);}

//快速幂

int qpow(int a,int b,int m){

int sum=1;

while(b){

if(b&1) sum=sum\*a%m;

b>>=1;

a=a\*a%m;

}

return sum;

}

int main(){

ios::sync\_with\_stdio(false);

return 0;

}