Standard Code Library

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Contents

一切的开始

宏定义

```cpp
#include <bits/stdc++.h>
using namespace std;
using ll = long long;

#ifndef ONLINE_JUDGE
#define dbg(args...)                                 \
    do {                                             \
        cerr << "\033[32;1m" << #args << " -> "; \
        err(args);                                   \
    } while (0)
#else
#define dbg(...)
#endif
void err() { cerr << "\033[39;0m" << endl; }
template <template <typename...> class T, typename t, typename... Args>
void err(T<t> a, Args... args) {
    for (auto x : a) cerr << x << ' ';
    err(args...);
}
template <typename T, typename... Args>
void err(T a, Args... args) {
    cerr << a << ' ';
    err(args...);
}
// -----------------------------------------------------------------------------
```

读入挂

```cpp
inline char nc() {
    static char buf[100000], *p1 = buf, *p2 = buf;
    return p1 == p2 &&
                   (p2 = (p1 = buf) + fread(buf, 1, 100000, stdin), p1 == p2)
               ? EOF
               : *p1++;
}
template <typename T>
bool rn(T& v) {
    static char ch;
    while (ch != EOF && !isdigit(ch)) ch = nc();
    if (ch == EOF) return false;
    for (v = 0; isdigit(ch); ch = nc()) v = v * 10 + ch - '0';
    return true;
}

template <typename T>
void o(T p) {
    static int stk[70], tp;
    if (p == 0) {
        putchar('0');
        return;
    }
    if (p < 0) {
        p = -p;
        putchar('-');
    }
    while (p) stk[++tp] = p % 10, p /= 10;
    while (tp) putchar(stk[tp--] + '0');
}
```

快速幂

```
ll pow(ll x, ll n, ll mod) {
    assert(n >= 0);
    ll ret = mod != 1;
    for (x %= mod; n; n >>= 1, x = x * x % mod)
        if (n & 1) ret = ret * x % mod;
    return ret;
}
ll inv(ll a, ll p) { return pow(a, p - 2, p); }
inline ll mul(ll a, ll b, ll mod) {
    if (mod <= 1000000000)
        return a * b % mod;
    else if (mod <= 1000000000000ll)
        return (((a * (b >> 20) % mod) << 20) + (a * (b & ((1 << 20) - 1)))) % mod;
    else {
        ll d = (ll)floor(a * (long double)b / mod + 0.5);
        ll ret = (a * b - d * mod) % mod;
        if (ret < 0) ret += mod;
        return ret;
    }
}
```

基础算法

查分前缀和

```cpp
#include<iostream>
#include<algorithm>
using namespace std;
const int MAXN = 1e5+5;
int dif[MAXN];
int main() {
    int n;
    cin>>n;
    for(int i = 1;i <= n;i++) {
        int l,r;
        cin>>l>>r;
        dif[l]++,dif[r+1]--;
    }
    int sum = 0;
    for(int i = 1;i <= n;i++) {
        sum += dif[i];
        cout<<sum<<" ";
    }
    return 0;
}
```