

## Template

```
1 #include <bits/stdc++.h>
2 using namespace std;
3 using ll = long long;
4 using dd = long double;
5 using vi = vector<int>;
6 using vl = vector<long long>;
7 using vvi = vector<vector<int>>;
8 using pii = pair<int, int>;
9 using pll = pair<long long, long long>;
10 #define all(x) x.begin(), x.end()
11 #define eb emplace_back
12 #define F first
13 #define S second
14 const int maxn = 200'000;
15 const int MOD = 1e9 + 7;
16 void solve() {}
17 int main() {
18     ios::sync_with_stdio(false);
19     cin.tie(nullptr);
20     int tc = 1;
21     cin >> tc; // REMEMBER TO COMMENT OUT
22     while (tc--) { solve(); }
23     return 0;
24 }
```

## DSU

```
1 struct DSU {
2     vi e;
3     DSU(int n) : e(n, -1) {}
4     bool sameSet(int a, int b) { return find(a) == find(b); }
5     int size(int x) { return -efind(x); }
6     int find(int x) { return e[x] < 0 ? x : e[x] = find(e[x]); }
7     bool join(int a, int b) {
8         a = find(a), b = find(b);
9         if (a == b) {
10             return false;
11         }
12         if (e[a] > e[b]) {
13             swap(a, b);
14         }
15         e[a] += e[b];
16         e[b] = a;
17         return true;
18     }
19 };
```