Some Problem Solving Techniques

2D Prefix sum

Ordered_set/PBDS

2D Prefix Sum

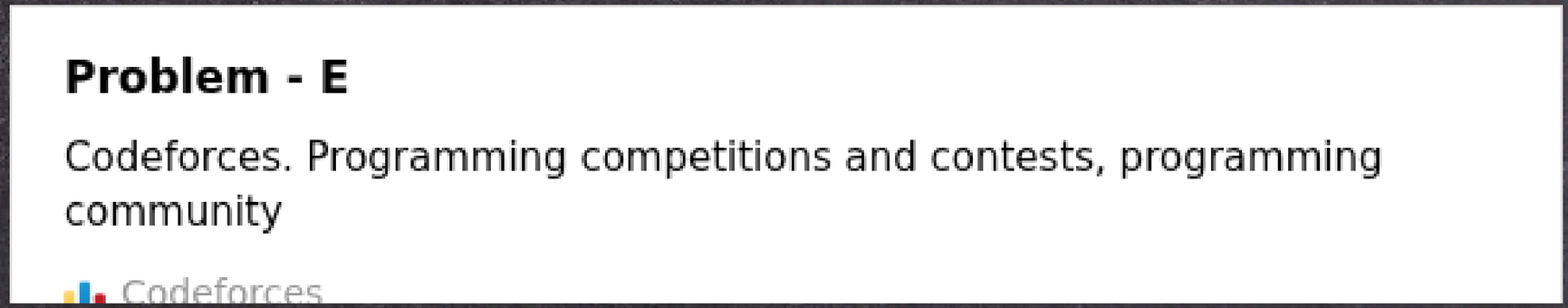
pre[i][j] = a[i][j] + pre[i][j - 1] + pre[i - 1][j] - pre[i - 1][j - 1]

pre[x2][y2] - pre[x2][y1 - 1] - pre[x1 - 1][y2] + pre[x1 - 1][y1 - 1]

2D Prefix Sum

https://cses.fi/problemset/task/1652

2D Prefix Sum



Ordered Set

```
#include <ext/pb_ds/assoc_container.hpp>
#include <ext/pb_ds/tree_policy.hpp>
using namespace __gnu_pbds;

#define ordered_set tree<long long, null_type, less<long long>, rb_tree_tag, tree_order_statistics_node_update>
// ordered_set ms
// ms.order_of_key(k) ~~ Number of items strictly smaller than k .
// ms.find_by_order(k); ~~ K-th iterator in a set (counting from zero).
```

Ordered Set

https://cses.fi/problemset/result/8030167/

Set Vs Ordered Set

- Declaration
- Erase on multiset
- Extra 2 funtions