

STL Pair : Declaration and access, make_pair() function

STL map : Declaration, [] operator, erase, size, complexity of these functions.

Formula Derivation of the number of possible unordered pairs from a set of unique numbers. $\rightarrow n * (n - 1) / 2$

Discussion of real life and interview usage of these data structures.

Problem Discussion :

<https://leetcode.com/problems/number-of-equivalent-domino-pairs/>

Solution Code :

```
#include <bits/stdc++.h>
using namespace std;
class Solution {
public:
    int numEquivDominoPairs(vector<vector<int>>& dominoes) {
        map < pair < int, int >, int > mp;
        for (vector < int > domino : dominoes) {
            pair <int, int > d = make_pair(domino[0], domino[1]);
            if (d.first > d.second) {
                swap(d.first, d.second);
            }
            mp[d]++;
        }
        int ans = 0;
        for (auto data : mp) {
            ans += data.second * (data.second - 1) / 2;
        }
        return ans;
    }
};
```