

## 1395. Count Number of Teams

```
class Solution {
public:
    int numTeams(std::vector<int>& rating) {
        int n=rating.size();
        int ans=0;
        for(int i=0;i<n;++i){
            int nb_greater_in_left=0;
            int nb_smaller_in_right=0;
            int nb_smaller_in_left=0;
            int nb_greater_in_right=0;

            for(int j=0;j<i;++j){
                if(rating[j]>rating[i]) nb_greater_in_left++;
                else nb_smaller_in_left++;
            }

            for(int j=i+1;j<n;++j){
                if(rating[j]>rating[i]) nb_greater_in_right++;
                else nb_smaller_in_right++;
            }

            ans+=nb_greater_in_left*nb_smaller_in_right+nb_smaller_in_left*nb_greater_in_right;
        }

        return ans;
    }
};
```

```

typedef std::vector<int> vi;
typedef std::pair<int,int> ii;
typedef std::vector<ii> vii;
typedef std::vector<vii> vvii;

class Solution {
public:
    int numTeams(std::vector<int>& rating) {
        int n=rating.size();
        int ans=0;

        vi arr=rating;
        std::sort(rating.begin(),rating.end());
        std::map<int,int> postions_in_sorted;
        for(int i=0;i<n;++i) postions_in_sorted[rating[i]]=i;
        for(int i=0;i<n;++i){
            int nb_greater_in_left=0;
            int nb_smaller_in_right=0;
            int nb_smaller_in_left=0;
            int nb_greater_in_right=0;

            for(int j=0;j<i;++j){
                if(arr[j]>arr[i]) nb_greater_in_left++;
            }

            int p=postions_in_sorted[arr[i]];

            nb_smaller_in_left=i-nb_greater_in_left;

            nb_smaller_in_right=p-nb_smaller_in_left;

            nb_greater_in_right=n-1-p-nb_greater_in_left;

            ans+=nb_greater_in_left*nb_smaller_in_right+nb_smaller_in_left*nb_greater_in_right;
        }

        return ans;
    }
};

```