贪心：942. 增减字符串匹配

```cpp
class Solution {
public:
    vector<int> diStringMatch(string s) {
        int n = s.size();
        int left = 0;
        int right = n;
        vector<int> ret(n + 1);
        for (int i = 0; i < n; i++) {
            if (s[i] == 'I') {
                ret[i] = left;
                left++;
            }
            if (s[i] == 'D') {
                ret[i] = right;
                right--;
            }
        }
        ret[n] = left;
        return ret ;
    }
};
```

BFS 拓扑排序：210. 课程表 II

```cpp
class Solution {
public:
    vector<int> findOrder(int n, vector<vector<int>>& prerequisites) {
        unordered_map<int,vector<int>> edges;
        vector<int> in(n);
        vector<int> ret;

        for(auto& e : prerequisites)
        {
            int a = e[0],b = e[1];
            edges[b].push_back(a);
            in[a]++;
        }

        queue<int> q;
        for(int i = 0;i < n;i++)
        {
            if(in[i] == 0)
            {
                ret.push_back(i);
                q.push(i);
            }

        }

        while(q.size())
        {
            int t = q.front();
            q.pop();
            for(auto e : edges[t])
            {
                in[e]--;
                if(in[e] == 0)
                {
                    q.push(e);
                    ret.push_back(e);
                }
            }
        }
```

```
        if (ret.size() != n) {
            return {};  // 返回空数组，表示无法完成所有课程
        }
        return ret;
    }
};
```