DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

Experiment-8

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Semester: 6ᵗʰ   **Subject Name: Competitive Coding-II**
Subject Code: 20CSP-351

AIM: To demonstrate the concept of Greedy.

Problem1: Best Time to Buy and Sell Stock II
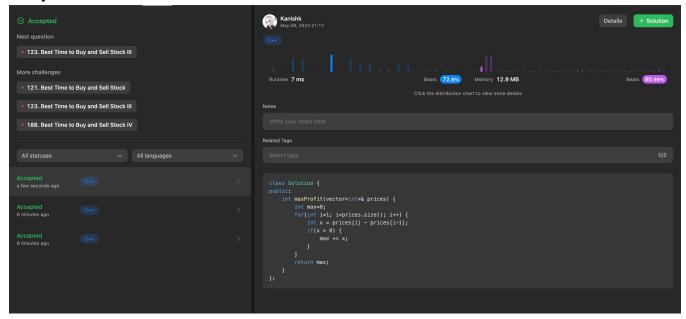https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii/

Program Code:

```cpp
class Solution {

public:

    int maxProfit(vector<int>& prices) {

        int max=0;

        for(int i=1; i<prices.size(); i++) {

            int x = prices[i] – prices[i–1];

            if(x > 0) {

                max += x;

            }

        }

        return max;

    }

};
```

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Output:

Probem2: Assign Cookies

https://leetcode.com/problems/assign-cookies/

Program Code:

```
class Solution {
public:
    int findContentChildren(vector<int>& g, vector<int>& s) {
        sort(begin(g), end(g));
        sort(begin(s), end(s));
        int i = 0;
        for (int j = 0; j < s.size() && i < g.size(); ++j){
            if (g[i] <= s[j]) {
                ++i;
            }
        }
        return i;
    }
```

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```
};
```

Output:


```cpp
class Solution {
public:
    int findContentChildren(vector<int>& g, vector<int>& s) {
        sort(begin(g), end(g));
        sort(begin(s), end(s));
        int i = 0;
        for (int j = 0; j < s.size() && i < g.size(); ++j){
            if (g[i] <= s[j]) {
                ++i;
            }
        }
        return i;
    }
};
```