Experiment 2.2

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Semester: 6   **Subject Code: 20CSP-351**

Subject Name: Competitive Coding-II   **Date of Performance: 27-04-2023**

1. **Aim:** To demonstrate the concept of Graph Problem1: Fin

2. **Objective:** The objective is to solve problem of graphs using its methods

3. **Code and output:**
   Problem 1: Find the Difference
   Code:

```java
class Solution {
    public char findTheDifference(String s, String t) {
        char c=0;
        for(char cs:s.toCharArray()) {
            c^=cs;
        }
        for(char ct:t.toCharArray()) {
            c^=ct;
        }
        return c;
    }
}
```

   Output:

Accepted Runtime: 0 ms

• Case 1   • Case 2

Input

s =
"abcd"

t =
"abcde"

Output

"e"

Expected

"e"

Problem 2: Predict the Winner
Code:
```java
class Solution {
    public boolean PredictTheWinner(int[] nums) {
        return process(nums, 0, nums.length - 1) >= 0;
    }
    private int process(int[] nums, int start, int end) {
        if (start == end) {
            return nums[start];
        }
        return Math.max(nums[start] - process(nums, start + 1, end), nums[end]
- process(nums, start, end - 1));
    }
}
```

Output:

Accepted Runtime: 0 ms

• Case 1   • Case 2

Input

nums =
[1,5,2]

Output

false

Expected

false