

Day 1 HackerRank Problem Solved

1. Repeated String

The screenshot shows the HackerRank interface for the 'Repeated String' problem. The problem description on the left states: 'There is a string, *s*, of lowercase English letters that is repeated infinitely many times. Given an integer, *n*, find and print the number of letter *a*'s in the first *n* letters of the infinite string.' An example is provided: *s* = 'abcac', *n* = 10, resulting in 4 occurrences of 'a'. The function description requires completing the `repeatedString` function with parameters *s* (string) and *n* (integer), returning an integer. The input format consists of a string *s* and an integer *n*. Constraints are $1 \leq |s| \leq 100$ and $1 \leq n \leq 10^{12}$. The solution code on the right is in Java:

```
void solve()
{
    char[] s = ns().toArray();
    long n = nl();
    int m = s.length;
    int ca = 0;
    for(char c : s){
        if(c == 'a')ca++;
    }
    long ret = (n/m)*ca;
    for(int i = 0; i < n%m; i++){
        if(s[i] == 'a')ret++;
    }
}
```

The interface shows a 'Congratulations' message and a 'Success' compiler message. The bottom status bar indicates 31°C, partly sunny, and the date 11-07-2023.

2. Simple Array Sum

The screenshot shows the HackerRank interface for the 'Simple Array Sum' problem. The problem description on the left states: 'Given an array of integers, find the sum of its elements. For example, if the array *ar* = [1, 2, 3], $1 + 2 + 3 = 6$, so return 6.' The function description requires completing the `simpleArraySum` function with parameter *ar* (array of integers), returning an integer. The input format consists of an integer *n* and *n* space-separated integers. Constraints are $0 < n, ar[i] \leq 1000$. The output format is a single integer. A sample input is provided: *n* = 6, array = [1, 2, 3, 4, 10, 11], resulting in a sample output of 21. The solution code on the right is in Java:

```
List<Integer> ar = Stream.of(bufferedReader.readLine().replaceAll("\\s+$", ""))
    .split(" ")
    .map(Integer::parseInt)
    .collect(toList());

int result = Result.simpleArraySum(ar);

bufferedWriter.write(String.valueOf(result));
bufferedWriter.newLine();

bufferedReader.close();
bufferedWriter.close();
```

The interface shows a 'Congratulations' message and a 'Success' compiler message. The bottom status bar indicates 31°C, partly sunny, and the date 11-07-2023.