

Editorials

(Code thru 0)

Problem : Jack the card player

Solution :

This problem can be solved by dp.

Obviously, it is required to calculate summation of $(dp[i][j])$ for all $i \geq 1$ & $i \leq n$.

Here $dp[j][i]$ represent the no. of ways to choose i card among the n given cards such that their sum will be j

So the state transition of dp for a particular index $k(1 \text{ to } n)$ will be –

$$dp[j][i] = dp[j][k] + dp[j-a[k]][i-1];$$

Time complexity – $O(N^3)$

memory – $O(N^3)$

Sample code link – [Jack the card player Submission #1348770413 | CodeThru\[0\] Question | Contests | HackerRank](#)

Problem and Editorial prepared by – Ansh Chaturvedi

Problem : Two string 1

Solution :

Convert every letter of both strings to lower case letters .

Then it is simple if else condition problem

Suppose strings are s and t ,

Given pseudo code for reference

```
If(s==t)cout<<0<<endl;
```

```
Else if(s > t )cout<<1<<endl;
```

Else cout<<-1<<endl;

Time complexity – $O(N)$

Sample code link – [Two strings 1 Submission #1348770985 | CodeThru\[0\] Question | Contests | HackerRank](#)

Problem and Editorial prepared by – Ansh Chaturvedi

Problem : Alice and bob and their anagram riddle

Solution :

Approach 1:

Just count the frequency of each alphabet ('a' to 'z') for each string. If frequency count for each alphabet matches for both the strings, you can rearrange otherwise no.

Time complexity – $O(T*N)$

T: No. of Test Cases

N:Length of string

memory – $O(1)$

Sample code link – <https://pastebin.com/g61si86f>

Approach 2:

Sort both the strings and compare. If both matches, then you can rearrange otherwise no.

Time complexity – $O(T*N*(\log N))$

T: No. of Test Cases

N:Length of string

memory – $O(1)$

Sample code link – <https://pastebin.com/82zSxykr>

Problem and Editorial prepared by – Shashwat Nayak

Problem : Shashwat and magic jar

Link to Similar Question

<https://codeforces.com/problemset/problem/579/A>

Editorial for above question:

<https://codeforces.com/blog/entry/20368>

Hint:

Think in base 3.

Use fast input/output if you are getting a time limit exceeded. Also use '\n' instead of endl.

Solution :

Convert the number into base 3 and add all the digits.

Eg:

$$29 = 1 \cdot 3^3 + 0 \cdot 3^2 + 0 \cdot 3^1 + 2 \cdot 3^0$$

29 in base 3 = 1002

answer = 1 + 0 + 0 + 2 = 3

It is the optimal way, There is no other minimum value of coins possible.

Time complexity – $O(T \cdot (\log N))$

T: No. of Test Cases

N: Value of X

memory – $O(1)$

Sample code link – <https://pastebin.com/s7DpXGPf>

Problem and Editorial prepared by – Shashwat Nayak