
 Marwadi University	Marwadi University Faculty of Technology Department of Information and Communication Technology	
Sem : 4	Name : VEDANT BHARAD	
Day : 96	Date : 21/01/2023	Enrollment No: 92100133023

CP Club 365 Days Challenge

Programming language – C++


Problem Statement

<https://www.codechef.com/problems/CANDY123>

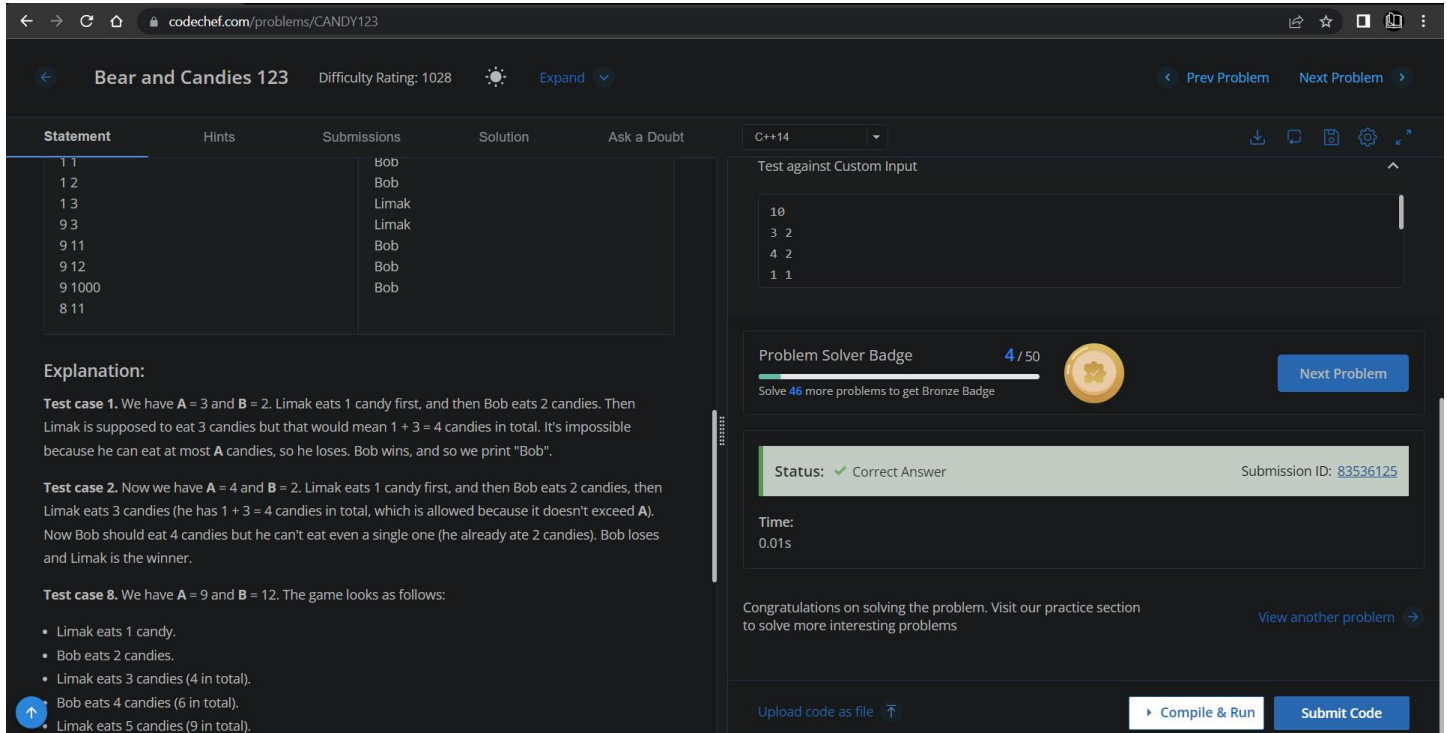
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Your Code:

```
// 0x96Day of 0x365Days challenge
// VEDANT BHARAD
// 21-1-2023
#include <bits/stdc++.h>
using namespace std;
string Candies(int a,int b) {
    int c=1,toeat=1;
    while (c!=0)
    {
        if(a<0 || b<0)
        {
            c=0;
        }
        else
        {
            if(toeat%2==0) //Bob
            {
                b-=toeat;
            }
            else //Limak
            {
                a-=toeat;
            }
        }
        toeat++;
    }
    if(a>b)
        return "Limak";
    else return "Bob";
}
int main() {
    int t;
    cin >> t;
    while (t--) {
        int a,b;
        cin>>a>>b;
        cout<<Candies(a,b)<<endl;
    }
    return 0;
}
```

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Output (Screen Shot):



The screenshot shows the CodeChef interface for the problem "Bear and Candies 123". The problem statement describes a game where two players, Limak and Bob, take turns eating candies from a pile of size A. Limak starts first, followed by Bob, and so on. The game ends when a player cannot eat their required number of candies because the pile is empty. The player who cannot eat loses, and the other player wins. The task is to determine the winner for given values of A and B.

Test cases and results:

Test Case	A	B	Winner
1	3	2	Bob
2	4	2	Limak
3	9	3	Limak
4	11	9	Bob
5	12	9	Bob
6	1000	9	Bob
7	11	8	Bob

Explanation:

Test case 1. We have $A = 3$ and $B = 2$. Limak eats 1 candy first, and then Bob eats 2 candies. Then Limak is supposed to eat 3 candies but that would mean $1 + 3 = 4$ candies in total. It's impossible because he can eat at most A candies, so he loses. Bob wins, and so we print "Bob".

Test case 2. Now we have $A = 4$ and $B = 2$. Limak eats 1 candy first, and then Bob eats 2 candies, then Limak eats 3 candies (he has $1 + 3 = 4$ candies in total, which is allowed because it doesn't exceed A). Now Bob should eat 4 candies but he can't eat even a single one (he already ate 2 candies). Bob loses and Limak is the winner.

Test case 8. We have $A = 9$ and $B = 12$. The game looks as follows:

- Limak eats 1 candy.
- Bob eats 2 candies.
- Limak eats 3 candies (4 in total).
- Bob eats 4 candies (6 in total).
- Limak eats 5 candies (9 in total).

The submission shows a "Correct Answer" status with a submission ID of 83536125 and a time of 0.01s.

Understanding about problem:

- In this task I need to return the winner name of the game which is given in statement if any person need to eat more candies then his limits then that person will lose the game.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST
Team CP Club