

Problem 3222: Find the Winning Player in Coin Game

Problem Information

Difficulty: Easy

Acceptance Rate: 52.60%

Paid Only: No

Tags: Math, Simulation, Game Theory

Problem Description

You are given two **positive** integers x and y , denoting the number of coins with values 75 and 10 _respectively_.

Alice and Bob are playing a game. Each turn, starting with **Alice**, the player must pick up coins with a **total** value 115. If the player is unable to do so, they **lose** the game.

Return the `_name_` of the player who wins the game if both players play **optimally**.

Example 1:

Input: $x = 2, y = 7$

Output: "Alice"

Explanation:

The game ends in a single turn:

* Alice picks 1 coin with a value of 75 and 4 coins with a value of 10.

Example 2:

Input: $x = 4, y = 11$

****Output:**** "Bob"

****Explanation:****

The game ends in 2 turns:

* Alice picks 1 coin with a value of 75 and 4 coins with a value of 10. * Bob picks 1 coin with a value of 75 and 4 coins with a value of 10.

****Constraints:****

* `1 <= x, y <= 100`

Code Snippets

C++:

```
class Solution {  
public:  
    string winningPlayer(int x, int y) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String winningPlayer(int x, int y) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def winningPlayer(self, x: int, y: int) -> str:
```