

ASK/VIEW DOUBT

SOLUTION

HINT

Problem

Result

Send Feedback

Whis and Beerus are playing a new game today. They form a tower of N coins and make a move in alternate turns. Beerus plays first. In one step, the player can remove either 1, X, or Y coins from the tower. The person to make the last move wins the game. Can you find out who wins the game?

Input format :

The first and the only line of input contains three integer values separated by a single space. They denote the value of N, X and Y, respectively.

Output format :

Prints the name of the winner, either 'Whis' or 'Beerus' (Without the quotes).

Constraints :

1 <= N <= 10 ^ 6

2 <= X <= Y<= 50

Time Limit: 1 sec

Sample Input 1 :

4 2 3

Sample Output 1 :

Whis

Sample Input 2 :

10 2 4

Sample Output 2 :

Beerus

1 string solve(int n, int x, int y)

2 {

3 // Write your code here .

4

5 int dp[n+1];

6

7 dp[1] = 1;

8 dp[x] = 1;

9 dp[y] = 1;

10 for(int i=2;i<=n;i++){

11 if(i==x || i==y){

12 continue;

13 }

14

15 int b = -2,c = -2;

16 int a = dp[i-1]^1;

17 if(i-x>0)

18 b = dp[i-x]^1;

19 if(i-y>0)

20 c = dp[i-y]^1;

21

22 dp[i] = max(a,max(b,c));

23 //cout<<dp[i]<<endl;

24

25 if(dp[n]==1){

26 return "Beerus";

27 }

28 else{

29 return "Whis";

30 }

31 }

32 }

< PREVIOUS

> NEXT

CUSTOM INPUT

SUBMIT SOLUTION