

Problem D

Divisive Stone Battle

Bash and Chikapu, as part of their training for the national Pokenom championship, often play strategic games to sharpen their wits.

Today, they gathered some stones in the nearby forest and now are engaging in the following game:

- Initially, they arrange the stones into n piles. The i -th pile contains a_i stones. They also choose an integer k .
- They alternatively take turns. Bash plays first.
- In each turn, a player picks a non-empty pile of stones. Suppose the player chooses the i -th pile. Let c_i be the current number of stones of this pile. Then the player removes some stones from this pile, so that the number of remaining stones is either $c_i - 1$ or $\lfloor \frac{c_i}{k} \rfloor$.
- The player unable to make a move on their turn loses the game.

Both Bash and Chikapu play optimally given their exceptional intelligence. Your task is to determine the winner of the game.

As a reminder, $\lfloor x \rfloor$ is the largest integer which is not greater than x .

Input

The first line of the input contains a single integer t ($1 \leq t \leq 10^5$), the number of test cases. t test cases follow, each is presented as below:

- The first line contains two integers n and k ($1 \leq n \leq 10^5, 2 \leq k \leq 100$) denoting the number of piles and the chosen integer, respectively.
- The second line contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^{18}$) – the number of stones in each pile.

It is guaranteed that the sum of n over all test cases does not exceed 10^5 .

Output

For each test case, print on a single line the name of the winner, either Bash or Chikapu.

Sample Input 1

```
2
1 2
1
4 2
7 7 6 6
```

Sample Output 1

```
Bash
Chikapu
```