

## Problem 6: Seven 7 Points

Problem ID: sixseven

Rank: 2

### Introduction

Big Ben the Brown Bear and [Oski](#) the Other Bear got bored of all the CALICOding we do at CALICO and decided to lighten the mood. However, they couldn't figure out how to entertain the constantly [doomscrolling](#) team members... so they made up an entire game to satisfy our [brainrotted](#) needs.



# Problem Statement

Big Ben and Oski are playing a game and the rules they came up with are as follows:

1. Big Ben and Oski decide on the number of turns  $K$  they will take in total before they start.
2. Next, on each player's turn, the player says either 6 or 7.
3. Big Ben starts first. Oski goes second. They continue alternating turns.
4. Then, if a player says 7 after the previous player said 6, the player who said 7 goes again.  
Note: this breaks the previous alternating pattern.
5. Finally, the player whose turn it is on the  $K^{\text{th}}$  turn loses.

For example, if Oski says 6 on turn 4 and Big Ben says 7 on turn 5, Big Ben goes again on turn 6. If  $K = 6$ , then Big Ben loses.

Given the number of turns  $K$  Big Ben and Oski have decided upon, and assuming that they both play optimally, output the name of the player that will win.

## Input Format

The first line of the input contains an integer  $T$  denoting the number of test cases that follow.

Each test case is described by a single line containing a single integer  $K$  denoting the total number of turns in the game.

## Output Format

For each test case, output a single line containing either `Big Ben` or `Oski` denoting the winner of the game assuming both players play optimally.

## Constraints

$$1 \leq T \leq 100$$

$$1 \leq K \leq 10^6$$

# Sample Test Cases

## Sample Input

```
3  
1  
5  
20
```

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## Sample Output

```
Oski  
Big Ben  
Big Ben
```

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## Sample Explanations

For the first test case we have  $K = 1$ . Since the player whose turn it is on turn  $K$  always loses, and Big Ben always starts on turn 1, Oski will always win regardless of what Big Ben says.

For the second test case with  $K = 5$ , the optimal strategy for Big Ben is to start by saying 6 on turn 1. Oski then has two options:

- If Oski says 6 on turn 2, Big Ben can say 7 on turn 3 allowing him to say something again on turn 4. Regardless of what he says, it will be Oski on turn 5, so Oski loses and Big Ben wins.
- If Oski says 7 on turn 2 allowing him to say something again on turn 3, Big Ben can say 6 on turn 4, making it Oski on turn 5, so Oski loses and Big Ben wins.

For the third test case with  $K = 20$ , it can be shown that a strategy exists for Big Ben that will always win for him.