Cats and a Mouse

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Two cats named A and B are standing at integral points on the x-axis. Cat A is standing at point x and cat B is standing at point y. Both cats run at the same speed, and they want to catch a mouse named C that's hiding at integral point z on the x-axis. Can you determine who will catch the mouse?

You are given q queries in the form of x, y, and z. For each query, print the appropriate answer on a new line:

- If cat A catches the mouse first, print `Cat A`.
- If cat B catches the mouse first, print `Cat B`.
- If both cats reach the mouse at the same time, print `Mouse C` as the two cats fight and mouse escapes.

Input Format

The first line contains a single integer, q, denoting the number of queries.
Each of the q subsequent lines contains three space-separated integers describing the respective values of x (cat A's location), y (cat B's location), and z (mouse C's location).

Constraints

- $1 \leq q \leq 100$
- $1 \leq x, y, z \leq 100$

Output Format

On a new line for each query, print `Cat A` if cat A catches the mouse first, `Cat B` if cat B catches the mouse first, or `Mouse C` if the mouse escapes.

Sample Input 0

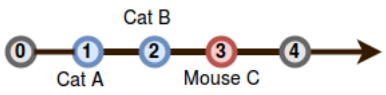
```
3
1 2 3
1 3 2
2 1 3
```

Sample Output 0

```
Cat B
Mouse C
Cat A
```

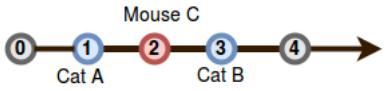
Explanation 0

Query 0: The positions of the cats and mouse are shown below:



Cat B will catch the mouse first, so we print `Cat B` on a new line.

Query 1: In this query, cats A and B reach mouse C at the exact same time:



Because the mouse escapes, we print `Mouse C` on a new line.

Submissions:34822

Max Score:15

Difficulty: Easy

Rate This Challenge:

More

Current Buffer (saved locally, editable) Java 7

```
import java.io.*;
import java.util.*;
import java.text.*;
import java.math.*;
import java.util.regex.*;

public class Solution {

    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int q = in.nextInt();
        for(int a0 = 0; a0 < q; a0++){
            int x = in.nextInt();
            int y = in.nextInt();
            int z = in.nextInt();
        }
    }
}

```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code