Problem: Cats & The Mouse

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

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

* If cat  catches the mouse first, print Cat A.
* If cat  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, , denoting the number of queries.   
Each of the  subsequent lines contains three space-separated integers describing the respective values of  (cat 's location),  (cat 's location), and  (mouse 's location).

**Constraints**

**Output Format**

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

**Sample Input 0**

3

1 2 3

1 3 2

2 1 3

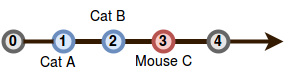
**Sample Output 0**

Cat B

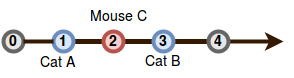
Mouse C

Cat A

**Explanation 0**

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

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

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

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

Solution

main()

{

int queries;

int catA, catB, mouseC;

cin>>queries;

for(int i=0; i<queries; i++)

{ cin>>catA >>catB >>mouseC;

int distance1=abs(mouseC- catA);

int distance2=abs(mouseC - catB);

if(distance1==distance2)

{cout<<"Mouse C";}

else

{ (distance1 < distance2 ? cout<<"Cat A" : cout<<"Cat B"); }

cout<<endl;

}

return 0;

}

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