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# Mean and Median

Problem Code: **MEANMEDIAN**

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Chef has two numbers  $X$  and  $Y$ . Chef wants to find three integers  $A$ ,  $B$ , and  $C$  such that:

- $-1000 \leq A, B, C \leq 1000$
- $mean([A, B, C]) = X$
- $median([A, B, C]) = Y$

Can you help Chef find such three integers?

As a reminder,  $mean([P, Q, R]) = \frac{P+Q+R}{3}$  and  $median([P, Q, R])$  is the element at the  $2^{nd}$  (middle) position after we sort  $[P, Q, R]$  in non-decreasing order.

## Input Format

- The first line contains a single integer  $T$  — the number of test cases. Then the test cases follow.
- The first and only line of each test case contains two space-separated integers  $X$  and  $Y$  — the required mean and median of the three integers.

## Output Format

For each test case, output three integers  $A, B, C$  which satisfy the given conditions.

It is guaranteed that an answer always exists under the given constraints.

If multiple answers exist, output any.

## Constraints

- $1 \leq T \leq 10^5$
- $-100 \leq X, Y \leq 100$

## Sample Input 1

```
3
5 5
67 100
4 5
```

## Sample Output 1

### Submission Ends In

1 16 45  
Hrs Min Sec

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```
5 5 5
0 100 101
0 5 7
```

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## Explanation

**Test Case 1:**  $mean([5, 5, 5]) = \frac{5+5+5}{3} = 5$ ,  $median([5, 5, 5]) = 5$ .

**Test Case 2:**  $mean([0, 100, 101]) = \frac{0+100+101}{3} = \frac{201}{3} = 67$ ,  
 $median([0, 100, 101]) = 100$ .

**Test Case 3:**  $mean([0, 5, 7]) = \frac{0+5+7}{3} = 4$ ,  $median([0, 5, 7]) = 5$ .

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Time Limit: 0.5 secs

Source Limit: 50000 Bytes

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