

This year,Hogwarts has been selected to host the coveted Triwizard Tournament. Harry has been nominated

to represent Hogwarts at the tournament.Being the hosts,the stakes are high & Harry doesn't want to disappoint anyone.

Harry in the second task in his quest to win the Triwizard Cup needs to rescue his friends which have been captured by the Merpeople.

Viktor Krum rescued Hermione whereas Cedric Diggory rescued Cho Chang.Unfortunately,Fleur Delacour was attacked by the grindylows & could not complete the task.Harry now needs to rescue both Ron & Gabrielle Delacour from the wrath of the sea.

The Merpeople would only allow Harry to rescue one of them.However,they would allow Harry to rescue both of them only if he solves a puzzle.

Given a rectangular paper of length L and breadth B,he needs to cut square pieces out of it; with each square being of the LARGEST length which can be made out of the remaining rectangle at each step.After removing a square from it,there would still be some part of the rectangle left.

He needs to keep on repeating this process,until he can't make any square smaller than unit length.

Also,he needs to inform the number of squares of each length that he made.

Time is running low for Ron & Gabrielle, Harry needs to quickly solve the problem. So he asks his best friend,you,to solve the problem for him.

Help Harry solve the puzzle & save both Ron & Gabrielle.

Input & Output:

First line contains the number of test cases.

Each test case precedes as following:

The first line for each test case contains the length(L) & breadth(B) of the rectangle.

On new line, for each test case print the length of each square & the number of times such squares are made.

Example :

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2
2 8
2 4
3 4
2 2
1 4
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Explanation:

Test Case 1

For the rectangle of length 2 and breadth 8,we can make exactly 4 squares of length 2.

No square greater then length 2 can be made.

Test Case 2

For the rectangle of length 3 and breadth 4, we can make 2 squares of length 2 and 4 squares of length 1.