ASTU ICPC CLUB
• An Excel-lent Problem

Problem

A certain spreadsheet program labels the columns of a spreadsheet using letters. Column 1 is labeled as "A", column 2 as "B", …, column 26 as "Z". When the number of columns is greater than 26, another letter is used. For example, column 27 is "AA", column 28 is "AB" and column 52 is "AZ". It follows that column 53 would be "BA" and so on. Similarly, when column "ZZ" is reached, the next column would be "AAA", then "AAB" and so on.

The rows in the spreadsheet are labeled using the row number. Rows start at 1.

The designation for a particular cell within the spreadsheet is created by combining the column label with the row label. For example, the upper-left most cell would be "A1". The cell at column 55 row 23 would be "BC23".

You will write a program that converts numeric row and column values into the spreadsheet designation.

Input

Input consists of lines of the form: RnCm. n represents the row number [1,300000000] and m represents the column number, $1 <= m <= 300000000$. The values n and m define a single cell on the spreadsheet. Input terminates with the line: R0C0 (that is, n and m are 0). There will be no leading zeroes or extra spaces in the input.

Output

For each line of input (except the terminating line), you will print out the spreadsheet designation for the specified cell as described above.

Example

Input	Output
R1C1	A1
R3C1	A3
R1C3	C1
R299999999C26	Z299999999
R52C52	AZ52
R53C17576	YYZ53
R53C17602	YZZ53
R0C0	