Alien Message

Input File: alien.txt

You have just received a secret message from an alien planet. However, the message you received is encrypted and currently makes no sense. Fortunately, the aliens have also sent you the instructions to decode the message. Your job is to use the key and instructions provided to decrypt the text, and print out the correct message.

Input:

The first line contains an integer N, which represents the number of messages you must decrypt. The next line will contain two integers separated by a space, indicating the number of rows and columns, respectively, in the matrix message below. This is followed by a matrix of that size. This pattern will repeat N times (representing the number of messages you receive).

Output:

In order to decode the message, you must first divide each element in every row by 7, then subtract **every other element** in every **column** by 19 (first element you subtract, second you do nothing, third element you subtract, etc.). Then, you convert all the numbers to chars, getting the equivalent ASCII character (i.e. 65 corresponds to 'A'), and print out every **column** all on the same line. You do this for each message, and have a new line for each new message.

Example Input:

Example Output:

Welcome to the TeamsCode Programming Competition!