Run Length Encoding

Given a String, compress the string using the Run Length Encoding mechanism.

Run Length encoding mechanism allows compression of strings by making note of the number of times they occured consecutively.

Eg) aaabbccc is encoded as 3a2b3c

First line of the input consists of a number t, denoting the number of test cases.

Each test case contains a string s, with length <=100

Output the compressed string for each test case

Sample Input

1

aaabbb

Sample Output

3a3b