Find ICPC

Given a string S containing only uppercase English letters count how many times the string "ICPC" occurs in the string S.

Input

The first line contains an integer T (1<=T<=100). T lines follow. Each line contains a string S. The length of S is between 1 and 1000.

Output

For each test case output "Case X: K" where X is the case number starting from 1 and K is the number of times ICPC occurs in the string S.

Example

Input:
2
ABDBIICPC
ICPCACPCICPC

Output:
Case 1: 1
Case 2: 2