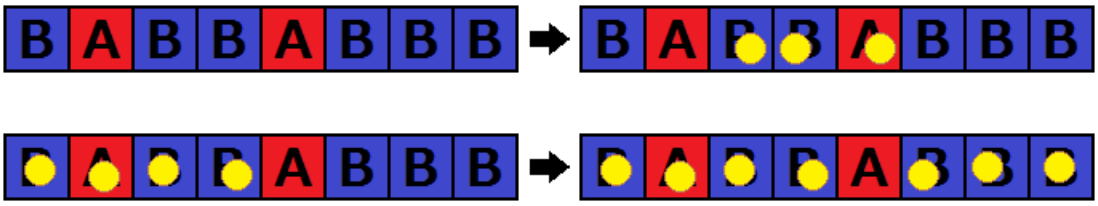
Coins on a row

Problem Statement

Ryan and Bret play the following game. The game board consists of some cells in a row. Each cell is marked either 'A' or 'B'. At the beginning, there are no coins placed on the board – all the cells are empty. Ryan and Bret take alternating turns. Ryan plays first. In each turn, the current player chooses some contiguous empty cells and places a coin onto each of the chosen cells. The player must always choose at least one cell. The player must never choose all empty cells. In other words, after each turn there must be at least one empty cell.

The following picture shows two examples of placing coins:



The game ends when there is only one cell left without a coin. If that cell is marked 'A', Ryan wins. Otherwise, Bret wins.

Input

There are multiple test cases. For each test case, there is a string representing **cells** (2<= length of **cells** <= 50). **cells** contains ‘A’ or ‘B’ only.

The input ends with EOF

Output

For each game, assuming that both players aim to win and play optimally, print the name of the winner.

Examples

Input	Output
ABBB BBBB BA BABBABBB ABABBBABAABBAA BBBAAABBAAABBB	Ryan Bret Ryan Bret Ryan Bret