# **Happy Ladybugs**



Happy Ladybugs is a board game having the following properties:

- The board is represented by a string, b, of length n. The  $i^{th}$  character of the string,  $b_i$ , denotes the  $i^{th}$  cell of the board.
  - ullet If  $b_i$  is an underscore (i.e., ullet), it means the  $i^{th}$  cell of the board is empty.
  - If  $b_i$  is an uppercase English alphabetic letter (i.e., A through  ${\sf Z}$ ), it means the  $i^{th}$  cell contains a ladybug of color  $b_i$ .
  - ullet String  $oldsymbol{b}$  will not contain any other characters.
- A ladybug is happy only when its left or right adjacent cell (i.e.,  $b_{i\pm 1}$ ) is occupied by another ladybug having the same color.
- In a single move, you can move a ladybug from its current position to any empty cell.

Given the values of n and b for b games of Happy Ladybugs, determine if it's possible to make all the ladybugs happy. For each game, print b on a new line if all the ladybugs can be made happy through some number of moves; otherwise, print b to indicate that no number of moves will result in all the ladybugs being happy.

#### **Input Format**

The first line contains an integer, g, denoting the number of games. The  $2 \cdot g$  subsequent lines describes a Happy Ladybugs game in the following format:

- 1. The first line contains an integer, n, denoting the number of cells on the board.
- 2. The second line contains a string, b, describing the n cells of the board.

### **Constraints**

- $1 \le g \le 100$
- 1 < n < 100
- It is guaranteed that string b consists of underscores and/or uppercase English alphabetic letters (i.e., and A through Z).

#### **Output Format**

For each game, print YES on a new line if it is possible to make all the ladybugs *happy*; otherwise, print NO.

## Sample Input 0

```
4
7
RBY_YBR
6
X_Y__X
2
6
B_RRBR
```

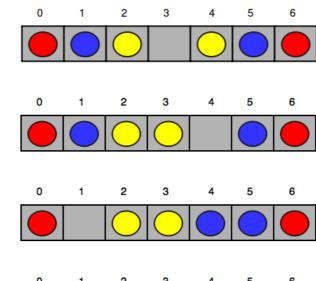
## Sample Output 0

```
YES
NO
YES
```

# **Explanation 0**

The first three games of Happy Ladybugs are explained below:

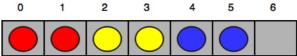
1. Initial board:



After the third move:

After the second move:

After the first move:



Now all the ladybugs are happy, so we print YES on a new line.

- 2. There is no way to make the ladybug having color Y happy, so we print NO on a new line.
- 3. There are no unhappy ladybugs, so we print YES on a new line.