Good or Bad

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

Given a string S. Determine whether this string is **Good** or **Bad**.

Note: The string is Good if and only if it has "010" or "101" as one of its sub-strings and it's not necessary to have both of them.

A substring of a string is a contiguous subsequence of that string. So, string "forces" is substring of string "codeforces but string "coder" is not.

Input

The first line contains a number T ($1 \le T \le 100$) number of test cases.

Each of the T following lines contains a string S ($1 \le |S| \le 10^5$) where |S| is the length of the string.

It's guaranteed that S contains only '1s' and '0s'.

Output

For each test case, print "Good" if the string is Good otherwise, print "Bad".

Example

standard input	standard output
2	Bad
11111110	Good
101010101010	

Note

Example case 1:

The string doesn't contain **010** or **101** as sub-strings.

Example case 2:

The string contains both 010 and 101 as sub-strings.