Good or Bad?

Description

Bikini Bottom has become inundated with tourists with super powers. Sponge Bob and Patrick are trying to figure out if a given character is good or bad, so they'll know whether to ask them to go jelly-fishing, or whether they should send Sandy, Mermaid Man, and Barnacle Boy after them.

SPONGE BOB: Wow, all these characters with super powers and we don't know whether they are good guys or bad guys.

PATRICK: Well, it's easy to tell. You just have to count up the number of g's and b's in their name. If they have more g's, they are good, if they have more b's, they are bad. Think about it, the greatest hero of them all, Algorithm Crunching Man is good since he has two g's and no b's.

SPONGE BOB: Oh, I get it. So Green Lantern is good and Boba Fett is bad!

PATRICK: Exactly! Uh, who's Boba Fett?

SPONGE BOB: Never mind. What about Superman?

PATRICK: Well he has the same number of g's as b's so he must be neutral.

SPONGE BOB: I see, no b's and no g's is the same number. Very clever Patrick! Well what about Batman? I thought he was good.

PATRICK: You clearly never saw *The Dark Knight...*

SPONGE BOB: Well what about Green Goblin? He's a baddy for sure and scary!

PATRICK: The Green Goblin is completely misunderstood. He's tormented by his past. Inside he's good and that's what counts. So the method works!

SPONGE BOB: Patrick, you are clearly on to something. But wait, are you saying that Plankton is neutral after all the terrible things he's tried to do to get the secret Crabby Patty formula?

PATRICK: Have any of his schemes ever worked?

SPONGE BOB: Hmmm, I guess not. Ultimately he's harmless and probably just needs a friend. So sure, neutral works for him.

PATRICK: Alright then, let's start taking names and figure this out.

SPONGE BOB: But Patrick, if we start counting all day, Squidward will probably get annoyed and play his clarinet and make us lose count.

PATRICK: Well, let's hire a human to do it for us on the computer. We'll pay them with Crabby Patties!

SPONGE BOB: Great idea Patrick. We're best friends forever!

Help Sponge Bob and Patrick figure out who is good and who is bad.

Input

The first line will contain an integer n $(n > 0)$, specifying the number of names to process. Following this will be n names, one per line. Each name will have at least 1 character and no more than 25. Names will be composed of letters (upper or lower case) and spaces only. Spaces will only be used to separate multiple word names (e.g., there is a space between Green and Goblin).

Output

For each name read, display the name followed by a single space, followed by " is ", and then followed by either "GOOD", "A BADDY", or "NEUTRAL" based on the relation of b's to g's. Each result should be ended with a newline.

Sample Input	Sample Output
8 Algorithm Crunching Man Green Lantern Boba Fett Superman Batman Green Goblin Barney Spider Pig	Algorithm Crunching Man is GOOD Green Lantern is GOOD Boba Fett is A BADDY Superman is NEUTRAL Batman is A BADDY Green Goblin is GOOD Barney is A BADDY Spider Pig is GOOD