Good String

Alien is given a string S and asked to find out whether the given string is a GOOD string or BAD. According to the challenge GOOD String is a string that has at least 3 consecutive vowels and at least 5 different consonants. Vowels are letters "A", "O", "E", "U", "I", and the rest are consonants. For example ACQUAINTANCES is a GOOD String ,as it contains 3 consecutive vowels UAI and 5 different consonants  C,Q,N,T,S but ACQUAINT is BAD ,as it contain 3 vowels but have only 4 different consonants  C,Q,N,T.

**Input:**

A string input is given from Standard Input that consists of only capital letters.

**Output:**

Output a single line that is either GOOD (if string is a good string) or BAD (if string is not good).

**Constraints**

8≤S≤1000

**Example**

**Input:**

AMBITIOUSNESS

**Output:**

GOOD

**Input :**

COOEY

**Output 2:**

BAD