0 0 0 0 : 0 0 0 0
ROUND 1 (0:00:23)

DESCRIPTION RULES README CODEWRITING SCORE: 0/300

Not long ago, a spam campaign originated on some of the major social networks, and it's started to affect Kik users as well. Most of the spam comes from a limited number of highly-motivated individuals, possibly from a single group, who constantly update their spam software. What started off as some simple message-sending bots has now evolved into something that requires a large team of engineers to fight against it.

At the beginning, the bots weren't that clever. The spam detection could essentially be narrowed down to checking messages against several simple criteria. For a user's stream of `messages` over a given time period, the spammer could be identified if:

- More than `90 %` of all messages had fewer than `5` words (here, a *word* is defined as a sequence of consecutive letters which is neither immediately preceded nor followed by another letter);
- More than `50 %` of messages to any one user had the same content, assuming that there were at least `2` messages to that user;
- More than `50 %` of all messages had the same content, assuming that there were at least `2` messages;
- More than `50 %` of all messages contained at least one of the words from the given list of `spamSignals` (the case of the letters doesn't matter).

You are applying to the Anti-Spam Team at Kik, so you want to make sure you understand how this basic spam detection program worked. Implement a function that, given a stream of `messages` and a list of `spamSignals`, determines whether it's possible that the user might be a spammer by checking against the criteria above.

Example

- For

```
messages = [["Sale today!", "2837273"],
            ["Unique offer!", "3873827"],
            ["Only today and only for you!", "2837273"],
            ["Sale today!", "2837273"],
            ["Unique offer!", "3873827"]]
```

and `spamSignals = ["sale", "discount", "offer"]`, the output should be

```
spamDetection(messages, spamSignals) = [
  "passed"
```

GIVE UP