Essay

The impending doom called final examination is approaching this year's high school seniors: one of the compulsory tasks is going to be writing an essay in their mother tongue. Mirko is under the impression that certain political parties are going to keep their promises, those regarding informatization and digitalization, which is why he thinks that this year's essays are going to be marked by a computer, instead of a human.

To test his doubts, Mirko is going to write an essay that doesn't necessarily make sense at all, but should pass the automatic basic conditions check. The essay passes the check if:

- it contains at least A, and at most B words;
- every word contains at least one, and at most 15 letters;
- the used vocabulary is large enough, in other words, the essay contains at least ^B/₂ **different** words.

Mirko was up late last night watching Big Brother, so he is asking you to write such an essay instead of him. The essay should be output in a single line, using only lowercase letters of the English alphabet and spaces (therefore, without punctuation such as dots, commas and such). The words used can, but need not be, words from the English (or any) language.

Input

The first and only line of input contains the integers A and B ($1 \le A \le B \le 100\ 000$) from the task.

Output

The first and only line of output must contain any essay that meets the rules from the task.

Sample Tests

Please note: each of the lower outputs is written in one line, but is broken into several lines because of the lack of space.

Input 1

27

Output 1

this shakespeare fella is good

Input 2

26 30

Output 2

the teacher told us that we did not need to read that but it was too loud to hear so can i still get points for this

Input 3

19 19

Output 3

the consequences of the conceptual discourse in the aforementioned novella seemingly reflect the paradigmatic tendencies of the stylistical classification