Given a string of characters – e.g. a DNA strand consisting of `A`, `C`, `T`, `G` nucleotides, our task is to detect strings with repeating sequences of a given minimum length. For instance the following string has a sequence of length 4 repeated 3 times, one of length 3 repeated 2 times, and perhaps more: `ACCTCGACGGTCACCTCAGGATCCTAGCCTCAGGA`.

Write a Python program that performs this task. Your program should be able to read a list of strings from a file and write the strings fulfilling the desired condition to the screen and/or another file, indicating which sequence is repeated how many times.

In your program you are NOT allowed to use any built-in string functions, **including the indexing and slicing mechanism**. You are allowed to use == to compare strings, but all the rest should be implemented by you as functions in case you need them.

Submit your code to Tunç by the deadline latest. Please include your name in the name of the file (e.g. umutozge.py) *and* as a comment in the code itself. The homework should be an individual effort. Feel free to consult me or Tunç, if you need further clarification about the homework.