Prescreen test Sanoma Digital

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1 Filling a grid with words

For simplicity you can assume that your code will be run in the following way:

```
$ cat ./run
#!/bin/sh

./solver --file dict.txt --really-big
```

A Big Word consists of a matrix filled with ASCII characters such that when we read each row we find a complete word which exists in the dictionary and when we read each column we also find a complete word which is in the dictionary. Additionally, sometimes we are interested in really big words, as indicated by the above flag. A really big word is a word which is lexicographically the largest among valid big words. We use row-major order to uniquely define the lexiographic relation.

You are given 30 minutes of wall clock time on a shared memory (16-core) machine with 2GB RAM to come up with the largest such Big Word you can find.

For example, giving a dictionary containing only:

```
LICENSE PREAMBLE
bla bla bla
---------------------------------------------------------------
pa
am
ma
```

We will want to find:

```
2x2
p a
a m
```

to complicate matters, when we are interested in the really big words, we would like to see as output:

```
2x2
p a
a m
```

and not:

```
2x2
m a
a m
```

Because this is lexicographically smaller.

You are free to use **any** "real" programming language for which an interpreter/-compiler can be installed via a package in CentOS 6.5. However, you should tell us the commands required to install these packages, if you require more than one such package. You **are** allowed to use libraries in CentOS 6.5, but if your code fails because one of the libraries has a bug, it's **all** on you.