ContentSquare Data Engineering Test
Auto-complete

You are given a list of keywords (on the next page). Write a program that will offer up to 4 suggested keywords from the list, starting with the letters typed, **not case sensitive.** Similar to Google Autocomplete, except that results must be in alphabetical order.
You will find examples at the end of this document.

Requirements

- You can use any programming language of your choice, preferably Scala or Java
- Do not make a web interface for input and output, a simple method taking a string and returning a list of strings is fine
- Do not use databases and complex libraries, write the completion logic yourself
- Think about optimization and algorithmic complexity, explaining the tradeoffs that you chose to made, if any

Deliverable

- Sources of your program, commented when necessary
- Other artifacts and files required to run the program (like the list of keywords, if your program loads it)

Additional Questions
No code expected, please give your answers in a Readme file

- What would you change if the list of keywords was much larger (300 Gb) ? Please explain and describe the concepts that would allow to handle this if you decide to use specific tools (frameworks, databases…)
- What would you change if the requirements were to match any portion of the keywords (for example, given the string "pro", the program could suggest the keyword "re**pro**be") ?

List of keywords

```
project runway
pinterest
river
kayak
progenex
progeria
pg&e
project free tv
bank
proactive
progesterone
press democrat
priceline
pandora
reprobe
paypal
```

Examples

Autocomplete("**p**")

```
pandora
paypal
pg&e
pinterest
```

Autocomplete("**pr**")

```
press democrat
priceline
proactive
progenex
```

Autocomplete("**pro**")

```
proactive
progenex
progeria
progesterone
```

Autocomplete("**prog**")

```
progenex
progeria
progesterone
```