

Please finish the below coding test, upload to public [github](#), and send us back the github link

Appreciate that the code will meet the requirements:

1. Well-structure maven project
2. Proper unit test with high test coverage
3. Consider OO with proper design pattern
4. Use some Java8 new feature if possible (advantage option)

**** IMPORTANT ****

Please do **NOT** put any wording onto github related to HSBC as cyber security issue, otherwise it would be considered as **FAILED** the code test.

Given a valid sentence without any spaces between the words and a dictionary of valid English words, find all possible ways to break the sentence in individual dictionary words.

Example:

```
Consider the following dictionary
{ i, like, sam, sung, samsung, mobile, ice, cream, man go}
```

```
Input: "ilikesamsungmobile"
```

```
Output: i like sam sung mobile
        i like samsung mobile
```

```
Input: "ilikeicecreamandmango"
```

```
Output: i like ice cream and man go
```

#Stage 2 - new requirement to be implemented:

If user provide a customized dictionary of valid English words as additional input, and the program will only find in the user customized dictionary

```
E.g.: the user customized dictionary
{ i, like, sam, sung, mobile, icecream, man go, mango}
```

#Stage 3 - new requirement to be implemented:

If user provide a customized dictionary of valid English words as additional input, and the program will find all the valid words in the both dictionaries

```
E.g.: the user customized dictionary
{ i, like, sam, sung, mobile, icecream, man go, mango}
```