Computer Programming II — Homework Assignment #4

1. Let *str* be a string. Write a program that finds every word *w* in a dictionary file which satisfies one of the following three pairs of conditions:

a. the length of *w* is equal to the length of *str*, and

b. *w* is different from *str* by exactly one character.

c. the length of *w* is one greater than the length of *str*, and

d. *str* is equal to a substring obtained by deleting a character from *w*.

e. the length of *w* is one less than the length of *str*, and

f. *w* is equal to a substring obtained by deleting a character from *str*.

For example, if *str* is the string **tabe**, then the word **table** satisfies conditions c and d, the word **tab** satisfies conditions e and f, and the following words satisfy conditions a and b:

**babe**

**tabs**

**take**

**tale**

**tame**

**tape**

**tube**

If *str* is the string **tabe**, the output should appear as follows:

|  |
| --- |
| **Word to check: tabe**  **Similar legal words: babe, tabs, take, tale, tame, tape, tube, table, tab** |

Please implement the member functions of classes **string**, **vector** and **SpellCheck**, defined in **string.h**, **vector.h** and **SpellCheck.h**, respectively.