Practice S12P03: Anagrams

http://www.comp.nus.edu.sg/~cs1010/4_misc/practice.html

Week of release: Week 12

Objective: Sorting

Task statement:

An anagram is a rearrangement of all the original letters in a phrase, disregarding any non-letter characters. For example "A decimal point" = "I'm a dot in place".

The website http://www.anagramsite.com/ contains a list of anagrams, some of which are rather interesting.

There are a few approaches to solving the problem of checking whether two phrases are anagrams of each other. One approach involves sorting. Write an algorithm of the solution that uses sorting, and implement it as **anagrams.c**. Test your program with the anagrams in the above website.

Your program should include a function

```
int areAnagrams(char str1[], char str2[])
```

which returns 1 if **str1** and **str2** are anagrams, or 0 otherwise.

You may assume that a phrase contains at most 60 characters. You may write additional functions if necessary.

Sample run:

```
Enter 1st phrase: George Bush
George Bush
Enter 2nd phrase: He bugs Gore
He bugs Gore
They are anagrams.
```