C++ Programming Assignment (#08)

Date: May 12, 2016

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Due date: May 18, 2016

Programming Projects

1. Write a function that determines if two strings are anagrams. The function should not be case sensitive and should disregard any punctuation or spaces. Two strings are anagrams if the letters can be rearranged to form each other. For example, "Eleven plus two" is an anagram of "Twelve plus one". Each string contains one "v", three "e's", two

WORD	Rearrange the letters
DORMITORY	DIRTY ROOM
PRESBYTERIAN	BEST IN PRAYER
ASTRONOMER	MOON STARER
DESPERATION	A ROPE ENDS IT
THE EYES	THEY SEE
GEORGE BUSH	HE BUGS GORE
THE MORSE CODE	HERE COME DOTS
SLOT MACHINES	CASH LOST IN ME
ANIMOSITY	IS NO AMITY
ELECTION RESULTS	LIES LET'S RECOUNT
MOTHER-IN-LAW	WOMAN HITLER
SNOOZE ALARMS	ALAS NO MORE Z'S
A DECIMAL POINT	IM A DOT IN PLACE
THE EARTHQUAKES	THAT QUEER SHAKE
ELEVEN PLUS TWO	TWELVE PLUS ONE

"I's", etc. Test your function with several strings that are anagrams and non-anagrams. You may use either the string class or a C-style string. [Project 11, Chapter 9, Absolute C++ 5ed.]

Sample dialogue:

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Input the 1st sentence: Dormitory

Input the 2nd sentence: Dirty room

Yes! They are anagrams!!

Continue? (y/n) y

Input the 1st sentence: Election results

Input the 2nd sentence: Lie - Let's recount

No! They are not anagrams!!

Continue? (y/n) n

Thank you!!
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2. Write a telephone directory program. For this program, you need to define a class person that has at least three member variables: name, phoneNumber, and memo.

Your program firstly asks how many people the user will input information for, then receives the data. The program can displays all data at a time or provides a menu for searching a specific person until the user wants to quit.



Sample dialogue:

For how many people you will input the information? 3

Person #1:

Name: Song Joong-ki

Phone number: 010-1234-5678

Memo: Descendants of the Sun

Person #2:

Name: Kim Soo-hyun

Phone number: 010-9876-5432

Memo: My Love from the Star

Person #3:

Name: Yoo Jae-seok

Phone number: 051-510-5555

Memo: _____

Menu:

- 1. Display all
- 2. Search one
- 3. Quit

Select> 1

Name	Phone Number	Memo
Song Joong-ki	010-1234-5678	Descendants of the Sun
Kim Soo-hyun	010-9876-5432	My Love from the Star
Yoo Jae-seok	051-510-5555	

Menu:

- 1. Display all
- 2. Search one
- 3. Quit

Select> 2

Name for search? Kim Soo-hyun

Name Phone Number Memo

Kim Soo-hyun 010-9876-5432 My Love from the Star

Menu:

- 1. Display all
- 2. Search one
- 3. Quit

Select> 3

Thank you!!