

## C 程式設計題

命題者：TCC

題目名稱(中文/英文)：Anagrams word

主要測試觀念：陣列使用基礎

Basics	Decision and Loops	Functions
<input type="checkbox"/> Keywords and Identifier <input type="checkbox"/> Variables and Constants <input type="checkbox"/> Programming Data Types <input type="checkbox"/> Expressions <input type="checkbox"/> Basic Input/Output <input type="checkbox"/> Programming Operators	<input type="checkbox"/> Programming if...else <input type="checkbox"/> Programming for Loops <input type="checkbox"/> do...while Loops <input type="checkbox"/> break and continue <input type="checkbox"/> switch...case Statement <input type="checkbox"/> Programming goto	<input type="checkbox"/> User-defined Functions <input type="checkbox"/> Function Types <input type="checkbox"/> Programming recursion <input type="checkbox"/> Storage Class (variable life)
Arrays and Strings	Pointers	Structure and Union
<input checked="" type="checkbox"/> Arrays <input type="checkbox"/> Multi-dimensional Arrays <input type="checkbox"/> Arrays and Functions <input type="checkbox"/> Strings and Functions	<input type="checkbox"/> Pointers And Arrays <input type="checkbox"/> Pointers And Functions <input type="checkbox"/> Dynamic Memory Allocations	<input type="checkbox"/> Structures and Pointers <input type="checkbox"/> Structure and Function <input type="checkbox"/> Programming Unions
Files I/O	Miscellaneous	Other
<input type="checkbox"/> Files Input/Output basics <input type="checkbox"/> Character I/O and String I/O <input type="checkbox"/> Block I/O <input type="checkbox"/> Advanced File I/O manipulations	<input type="checkbox"/> Enumeration <input type="checkbox"/> Preprocessor <input type="checkbox"/> Low level programming <input type="checkbox"/> Error handling <input type="checkbox"/> Standard/advanced library	<input type="checkbox"/> Programming logic training <input type="checkbox"/> Programming structure/design training <input type="checkbox"/> Localization issues <input type="checkbox"/> _____

**題目說明：**判別輸入的兩個單字是否為 anagrams (write a program to test if two words are anagrams (permutations of the same letters))

**輸入說明：**輸入兩個單字，大小寫視為相同( input two words with all lower case letters)

**輸出說明：**若兩單字是 anagrams 則輸出” The word are anagrams.”  
不是則輸出” The word are not anagrams.”

**I/O 範例：**

	Sample Input	Sample Output
第一組測資與輸出	Smartest mattress	The words are anagrams.
第二組	dumbest stumble	The words are not anagrams.

**附屬資料：**

☒ 解答程式：anagrams.c

☒ 測試資料：input.txt, output.txt

☒ 易，僅需用到基礎程式設計語法與結構（如單迴圈等）

☐ 中，需用到多項程式設計語法與結構（如雙層迴圈等）

☐ 難，需用到多項程式結構或較為複雜之資料型態或結構（如遞迴、串連等）

**解題時間：**10 分鐘。

**其他註記：**