University of Central Punjab
(Incorporated by Ordinance No. XXIV of 2002 promulgated by Government of the Punjab)
FACULTY OF INFORMATION TECHNOLOGY

Programming Fundamentals

Lab 06	
Topic	Functions and Filing

	• Arrays, Filing and Functions.
	  ○ Passing array into a function.
	  ○ Importance of array size in functions.
	  ○ Difference between size and occupy.
	  ○ Passing C-String into a function.
	  ○ Discuss why size is not required when we pass C-String to a function.
	  ○ Problem solving involving filing, function and array/C-String.

Lab Description:

This lab is basically designed for the revision of C-String, filing and functions

Lab Tasks

Word Problem:

Word provide us many features. One of them is word count. In some cases, we are restricted to use specific word count. In these kind of scenarios word count helps us. We have a file which contain some text. Perform following operation on given file.

Word count:

Find the count that how many words are there in given file.

Sentence count:

Find the count that how many sentences are there in given file.

Paragraph count:

Find the count that how many paragraphs are there in given file.

Security Problem:

Some time we have confidential data and we want to secure it. So nobody can see our data. There are many ways to secures data.

Caesar cipher:

Caesar cipher is an encryption technique. We use a key in order to encrypt our data. Each alphabet maps on another alphabet depends on key. Key is a numerical value which helps to apply encryption. If we pick 3 as key than A maps on D and so on.

Vigenere cipher:

Vigenere cipher is an encryption technique. Which works exactly same as Caesar cipher but in this technique we use a series of keys.

Sorting Problem:

PGC have thousands of employs. PGC want to design its own phone directory in form of a file which contain contact detail of their employs. But there is a problem the file contains data without any order so it cause difficulty to find the required details. Help PGC in this regard and try to sort the file on the bases of their employs name.