

Programming with Persistent Data C MPU 1028

Week 3

Lab 2:

Exercises with text files, standard I/O, standard library & strings

1.

Create a C program that asks to the user the names of two text files and then it creates another text file called merged.txt that contains the two files one after the other.

2.

Download the file population.txt from webcourses/content.

The file is a formatted text file with 3 columns: country, city and population.

Read the file using fscanf() and create a short C program to do the following:

- a) Display on the screen the sum of all the population of all the cities.
- b) Display the name and the population of the city with the highest population.
- c) Create a file with all the name of the cities in Ireland.

3.

Create a C program that asks the user the name of a text file (use gets()), opens that file¹ and then asks the user to input a word.

The program will scan the file line by line and stop when it reads a line containing the word entered by the user.

It will display an error message if the word is not in the file.

If the word is contained in the file, the program will show:

- a) The content of the line
- b) The line number and the position of the word in the line.

Hint: Use *strstr* to get the position of a string into another string.

¹ For testing your program you can download the file *search.txt* from webcourses and enter the word "program".