

CMPS 2010 Lab 6

Spring 2024

Program 1 - Arrays, Files, and Command Line Arguments (lab6-1.cpp)

Write a program that does the following:

1. Require the user to provide an input file name as a command line argument.
You can use this file for testing: <https://cs.csub.edu/~paul/cs2010/labs/numbers.txt>
2. Open an ifstream using the file name provided in step 1.
3. Read in all of the numbers from the input file using >> and store them in an array.
4. Use a for loop to **cout** all of the numbers stored in the array in **reverse order**.
5. Close the ifstream.

EXTRA CREDIT: Also **cout** the sum and average of all of the numbers.

Program 2 - Arrays and Functions (lab6-2.cpp)

Write a program that does the following:

1. Define and use the following three functions:
 - a. `string genFirstName()`
 - b. `string genLastName()`
 - c. `void printNames(int count)`
2. `genFirstName` will contain an array of at least 10 first names and randomly return one of the names.
3. `genLastName` will contain an array of at least 10 last names and randomly return one of the names.
4. `printNames` will use a for loop to print out names using `genFirstName()` and `genLastName()`
5. The main function will only do two things: seed `rand()` and call `printNames(10)`;

EXTRA CREDIT: Instead of printing out 10 names, allow the user to pass a number using command line arguments.

The program output should look something like this:

```
Bob Smith
Angela Warner
Neil Smith
Elon Howel
Jennifer West
Bob Johnson
Elon Walton
Bob McNuggets
Susan Howel
William King
Elon West
```

Run this command from your [lab6](#) folder to submit your work.

```
/home/fac/paul/s/submit.sh
```