

Lab 11

I have provided an **unchangeable** cscd240Lab11.c file. Your task is to write the functions.

HINT: There is only a small change between lab 9 and lab 11. Mainly in the fillArray function, and how the arrays are represented in the structure and the sorting routines.

The structure will contain:

```
char *street;  
char *city;  
char *state;  
int zip;
```

The menu portion will contain:

- 1) Print the array sorted by street
- 2) Print the array sorted by city then by zip
- 3) Print the array sorted by state then city then by zip
- 4) Print the array sorted by zip
- 5) Quit

You must verify range.

The input will come from a file, name entered by the user. You must ensure the file opens.

The sorts, stated above, come from calling qsort and passing it the appropriate compare function; this way you will only need a single print function.

There is no hidden agenda, just trying to get you to work with structures that contain pointers, and function pointers.

For the individual sorts you will use qsort as specified in main.

You must use a 3 file format

To Turn In

Submit a zip file

- Containing your C files and H file(s).
- Your makefile – target is lab11
- Include an output captures from running your program named cscd240Lab11output.txt.
- Include a valgrind run to ensure you are not leaking memory named cscd240Lab11Val.txt

Your zip will be named your last name first letter of your first name lab11.zip
(Example: steinerslab11.zip)