(50 points) Project Component (design only):

File must be called: menuDesign.pdf

1. (10) Start a design based on what we know how to do with output, input, input validation, conditionals, repetition, functions, and now arrays, pointers, and our new topic about structs for a menu system that allows you to run a choice of several games (or other programs!). You could think of this like a start menu on a computer or a command that runs what used to be other programs.

Starting with the menu I would look to see about putting my print statements for the intro and description in a function like this (probably need to consider formating like setw)

```
struc Record
member1;
member2;

void printDescription
cout << Usage: cmd mymenu
cout << "This is a program to capture input and store in a persitent structure
cout << "to be accesed later"
cout << "args are -f -m -d"

void storeInfo
cout << "what info do you want to store?"
strcp (structure.argv[1]
strcp (structure.argv[2])

string retrieveRecord(char argv[])
return(Record);
```

index	string1	string2
0	name	email

void verify input(char argv[])

2. (30) Now how would you change that design with some slightly more specific requirements: Note: I will refer to "options" in this assignment as the things that used to be individual programs.

thinking about I need to delete records i.e something changes almost forgot need to update records

- a. (10) be able to repeatedly ask users if they want to run another option after they complete one, maybe a warning after input to say are you sure you want to do this?
- b. (10) check that the inputs into the menu are valid and that the inputs into each of the options are valid, verify input so user doesn't get frustrated maybe embeded spaces or invalid type or to long or short of a string
- c. (10) run the chosen option completely and not affect other options when they run, cancel out something with an if statement
- 3. (10) What are some things to consider when you get to implementation? For example:
- a. Will you be able to just copy and paste directly into one huge program?
   my view is that you would create small programs to test intitally each function
- b. Will you need to modify any details to get individual programs to work as options in this program?

yes need to get -f -m args to work and figure out a way to accept things out of order

- c. Will you need to create many new functions and variables to facilitate the merging of all these programs? don't know probably a good idea to break out as many parts as possible
- d. Are there other major concerns I am leaving out that you can think of? I don't know but it looks daunting to get everything to work together

Remember to submit your report and source files to TEACH before the end of Sunday.