Lab #12: Multiple Files

Getting started

Download lab12 material from D2L
Enter Mimir IDE.
Change into the cse220 directory.
Create a new directory called lab12.
Change into the new directory.
Implement the programs below in your lab12 directory.

File Setup:

In order to begin this lab, you are given 3 files, **iocontroller.h**, **iocontroller.c**, and **main.c**. You can find them from starter codes and then upload them into lab12.

Programming:

For this lab, you are tasked with creating 2 files, **volume.h** and **volume.c**

The .h file will have function prototypes **getCubeVolume** and **getSphereVolume** that take in a float and return a float. The .c file will have the function definitions to return the correct volume for each shape.

After you complete **volume.h** and **volume.c**, you can compile all the files and achieve example inputs/outputs as showing below.

Hints: 1. Cube Volume = length * length * length
2. Sphere Volume = radius * radius * radius * PI * (4/3)
3. The compilation of multiple files is different from that of a single file. You may take Page 21 of lecture cse220-21-large-programs1-part1 as a clue.

Example inputs/outputs:

```
user@mimir: ~/cse220/lab12 > ./m
Please enter the first letter of the shape that you want to find the volume of: C
Please enter the side length of the cube: 3
The volume of a cube with side length 3.000000 is: 27.000000
Would you like to try again? (y/n): y
Please enter the first letter of the shape that you want to find the volume of: S
Please enter the radius of the sphere: 1
The volume of a sphere with radius 1.000000 is: 4.188787
Would you like to try again? (y/n): n
Exiting…
user@mimir: ~/cse220/lab12 >
```