



10.22 LAB

LAB HOUR: 18:30-21:20

Reminders

- Last day for submitting
 - HW 3 & LAB 5
- Lab ends at 9:30, we stop accepting demo after that. Make sure you have demoed what you want to demo before that.
- Get used to the local coding environments (i.e. codeblocks and dev-C++), because you won't be able to access online resources (i.e. repl.it) during programming exam.
- Get your own account for logging in PC, you will have to use PC in the classroom during programming exam. If you have any problem applying it, let us know and we'll help you.

Lab Exercise-1

- Write a program that asks user to enter a fraction, then reduces the fraction to lowest terms:

- This program must include the following function:

```
void reduce(int numerator, int denominator, int*  
reduce_numerator, int* reduce_denominator);
```

numerator and denominator are the numerator and denominator of a fraction.

reduce_numerator and reduce_denominator are pointers to variables in which the function will store the numerator and denominator of the fraction once it has been reduced to lowest terms.

- **Input:**

Enter a fraction: 6/12

- **Output:**

In lowest terms: 1/2

The value is: 0.5

Lab Exercise-1-Hint&Reminder

- ★ Hint: To reduce a fraction to lowest terms, first compute the GCD of the numerator and denominator. Then divide both the numerator and denominator by the GCD.
- ★ Reminder: Your input should be income in the main function and print out your answer inside your main function, too.

Lab Exercise-2

- Write a program that allows user to insert a string of number, and sort those number by using “selection sort”.
- The input part should be inside the main function and must be a int array. There should be a function help you finish the sorting task. The arguments you income should be like the example below. And you can only user pointer to exchange the numbers inside the array

```
void selectionSort ( int *arrPointer);
```

- Your input and ouput is supposed to be like :

```
input : 5 4 3 2 1
```

```
output : 1 2 3 4 5
```