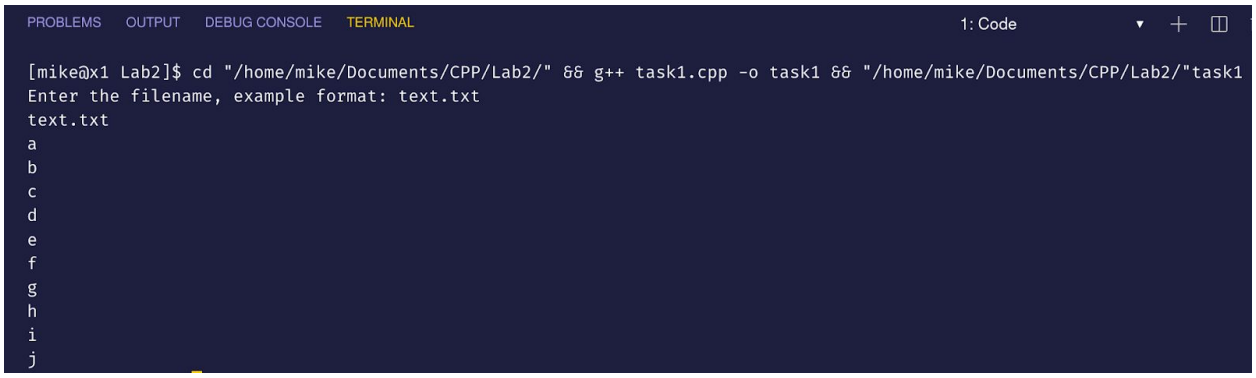
// Data Structures Laboratory
// Section 004
// Lab 2
// 9/11/2019
// Group 6
// Group Members: Anh Nguyen and Michael Stephens

a. During this assignment we explored many objectives/concepts that are important to this course and a career in CS or Engineering. Once very important topic that we explored is opening file and reading the information from them. This is very important for when there is a large data set that needs to be easily interpreted by a computer. We also learned how to write to file which can also be important for a computer to recognize information that is within a user file or when information needs to be displayed for business reasons.
b. We used ios::in for reading from files for task1, as well as, task3 and ios::app for appending to the end of files in task 2. They are the appropriate flags for such operations. We considered using ios::out for task 2, but knowing it will delete the existing file content, so decided against.
c. The class I designed includes all member variables in the private part of the class so as to keep them secured. The input file I put that way so as to make it easier for both user to read and programmer to code.
d. We test for every modular part of the code, just to make sure each of our operation works. We cout very often to check if the importation from file works, the array works,...

Task 1:



Task 2:

// Data Structures Laboratory
// Section 004
// Lab 2
// 9/11/2019
// Group 6
// Group Members: Anh Nguyen and Michael Stephens

task1.cpp | text.txt | task2.cpp | text2.txt

text2.txt

```
1  The sales for the company is: $
2  Div Q1  Q2  Q3  Q4
3  1   $1  $1  $1  $1
4  2   $1  $1  $1  $1
5  3   $1  $1  $1  $1
6
7  The total sales for the company are: $12
8
```

Task 3:
Input file:

Texttask3lab2.txt

```
1    914 842 12.95 0
2    915 416 14.95 0
3    916 127 18.95 0
4    917 514 16.95 0
5    918 437 21.95 0
6    919 269 31.95 0
7    920 97  14.95 0
8    921 492 14.95 0
9    922 212 16.95 0
10
```