**Subject: PRF192- PFC**

**Workshop 07**

**Objectives:**

**Managing strings**

**Managing parallel arrays**

**Problem 1: (3 marks) Managing a list of student names**

Write a C-program that helps user managing a list of 100 student names using the following menu:

1- Add a student

2- Remove a student

3- Search a student

4- Print the list in ascending order

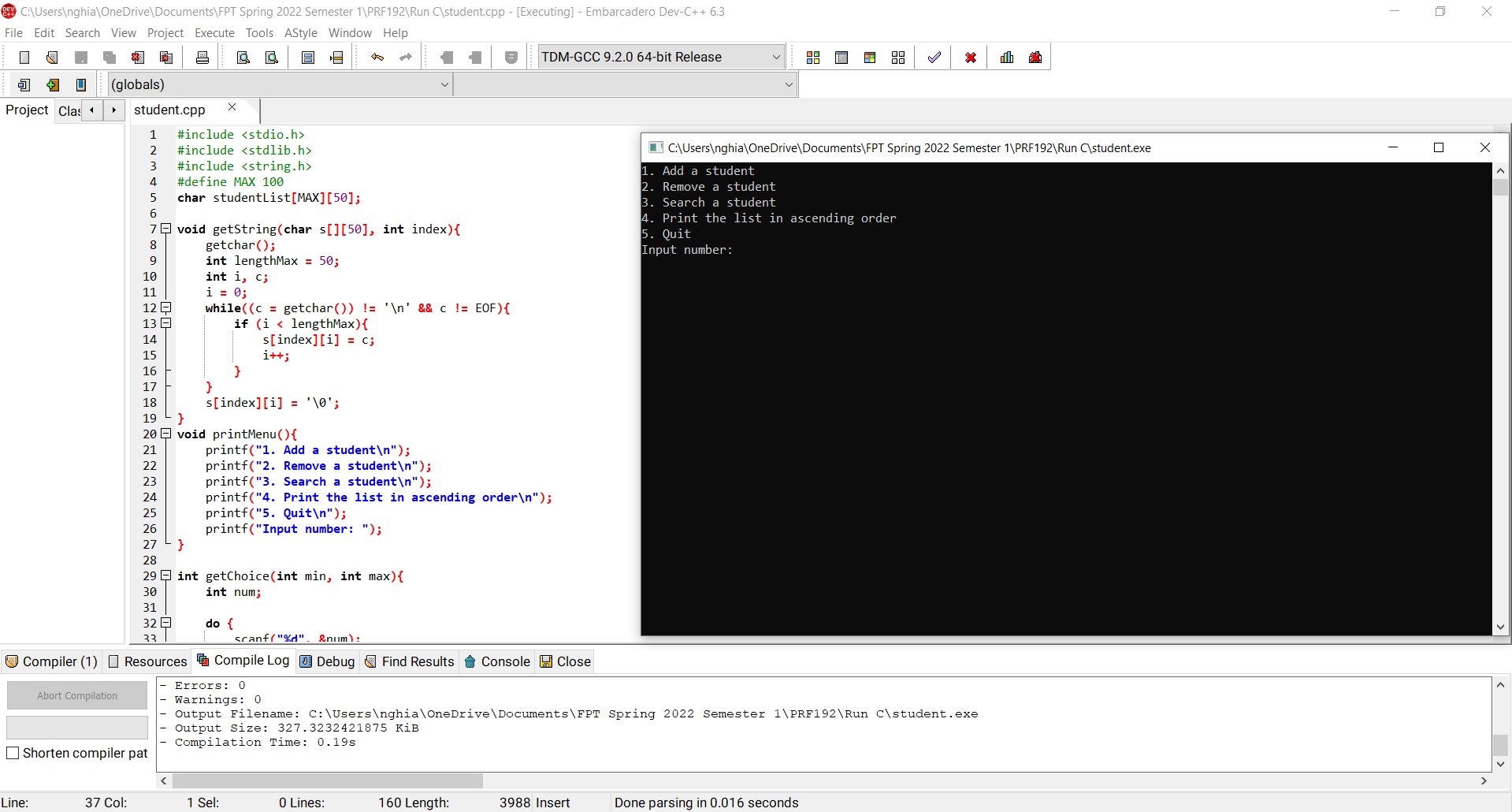
5- Quit

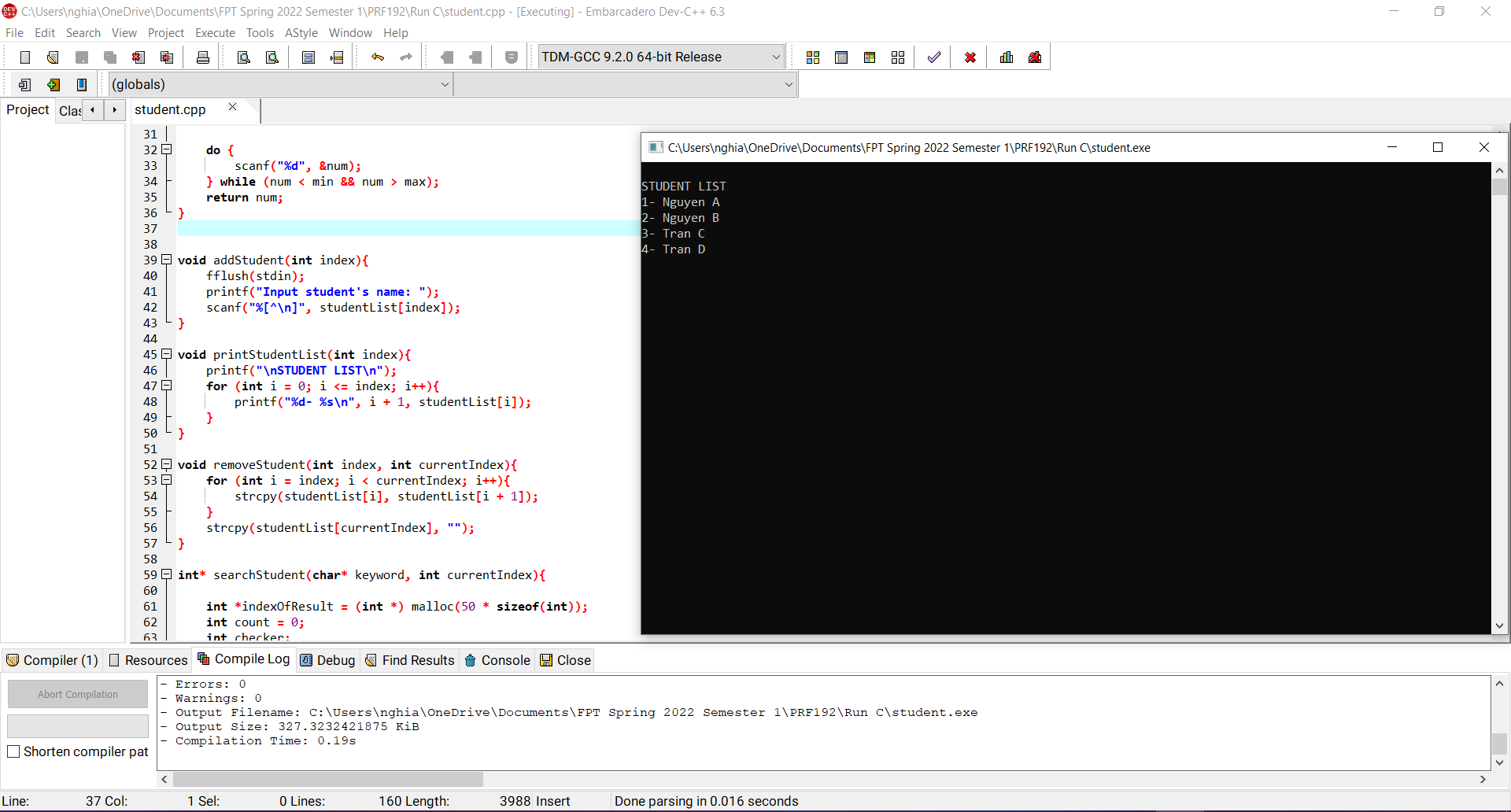
**Criteria**

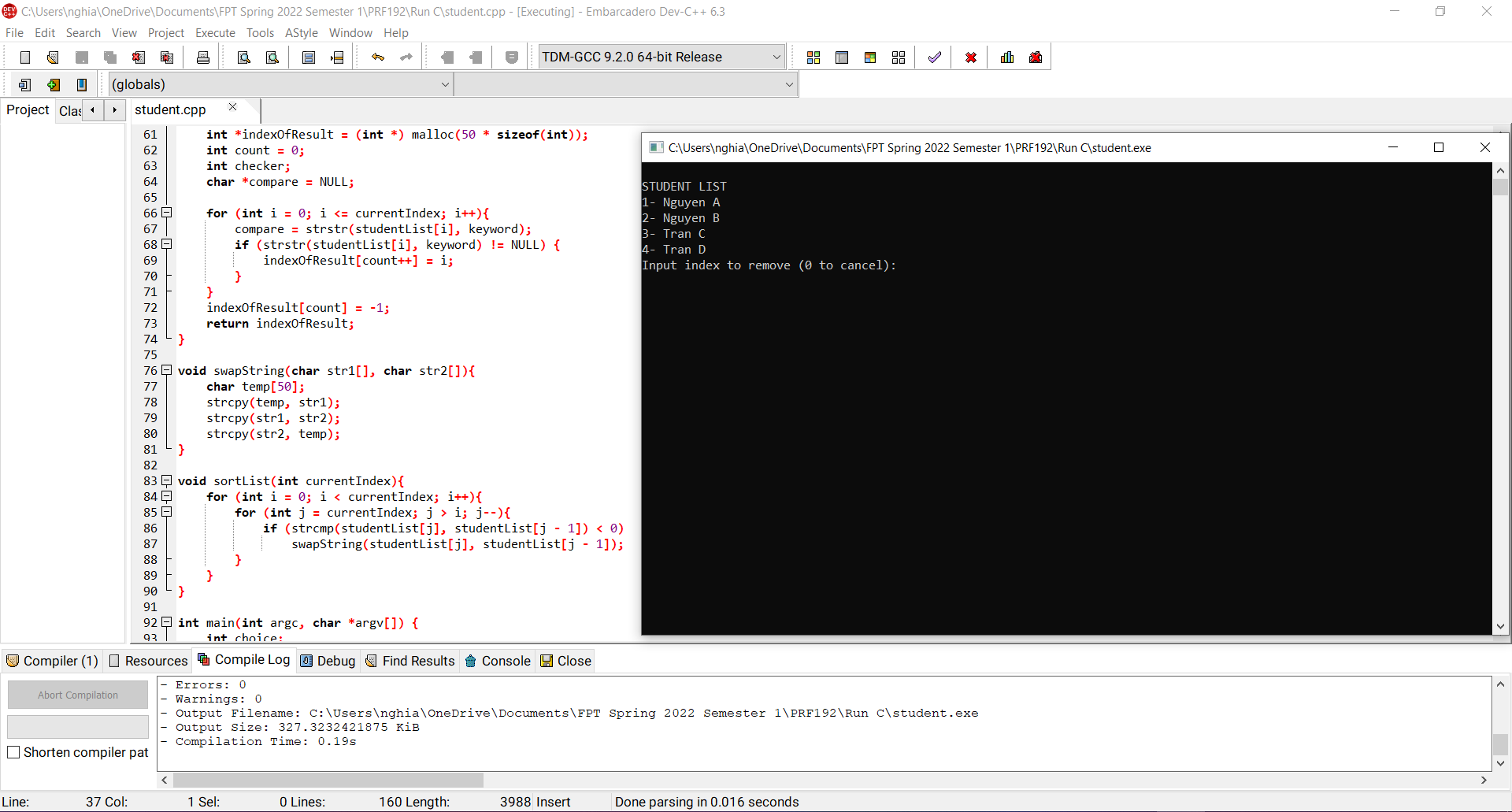
* Names stored in uppercase, all extra blanks in a name will be removed by code.

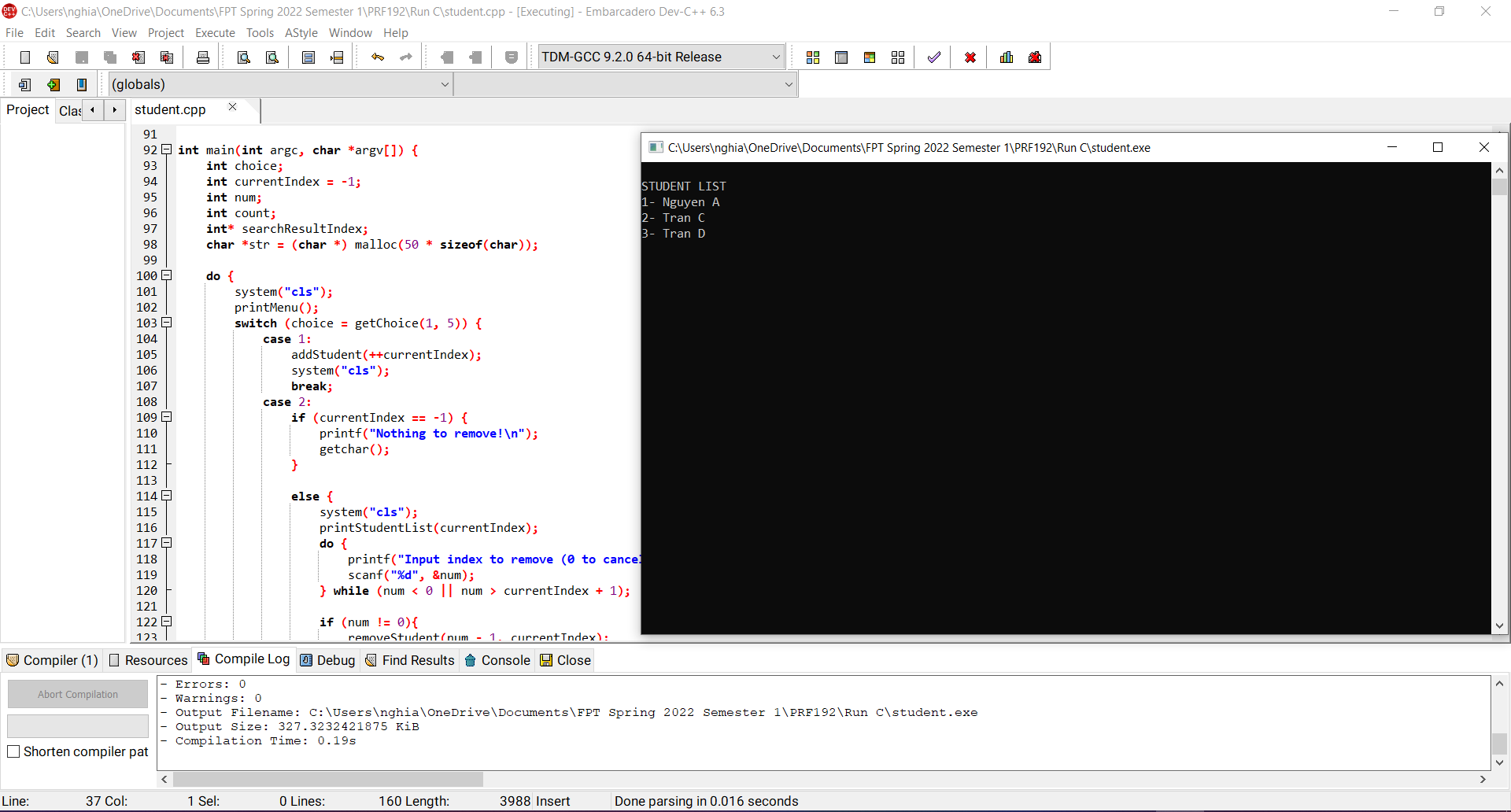
**Recommendation**

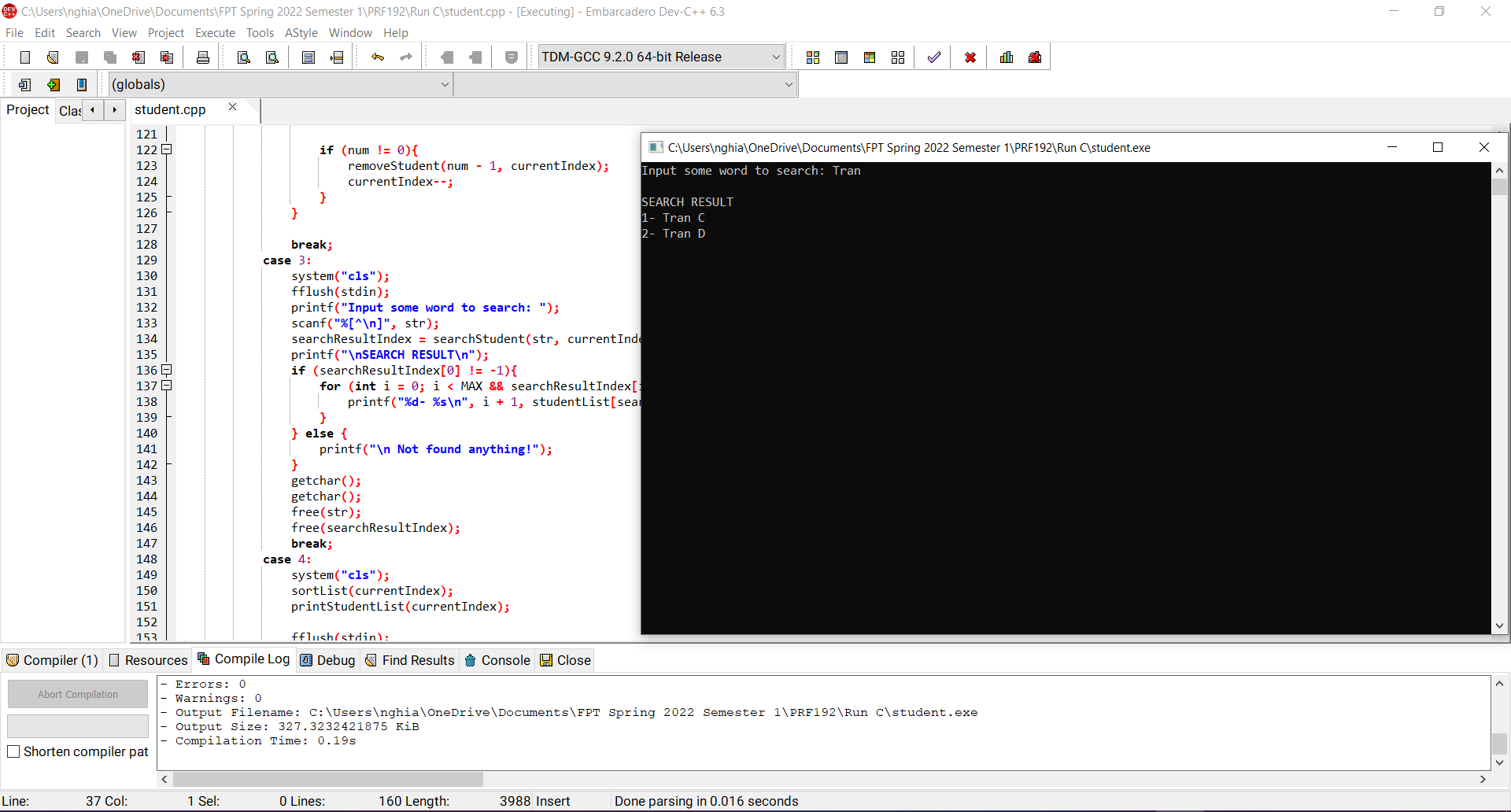
Refer to algorithms on string in the lecture’s slide

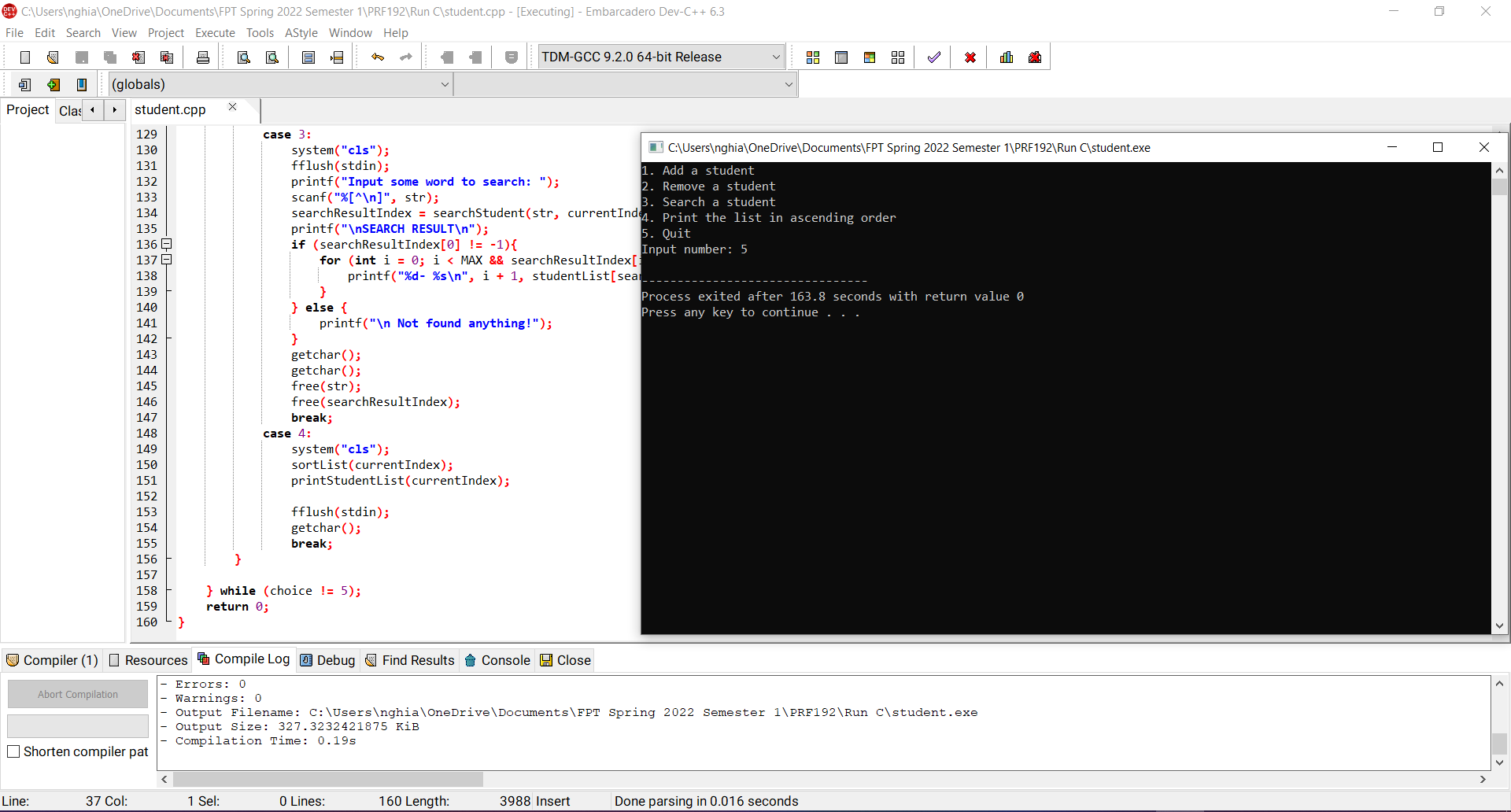








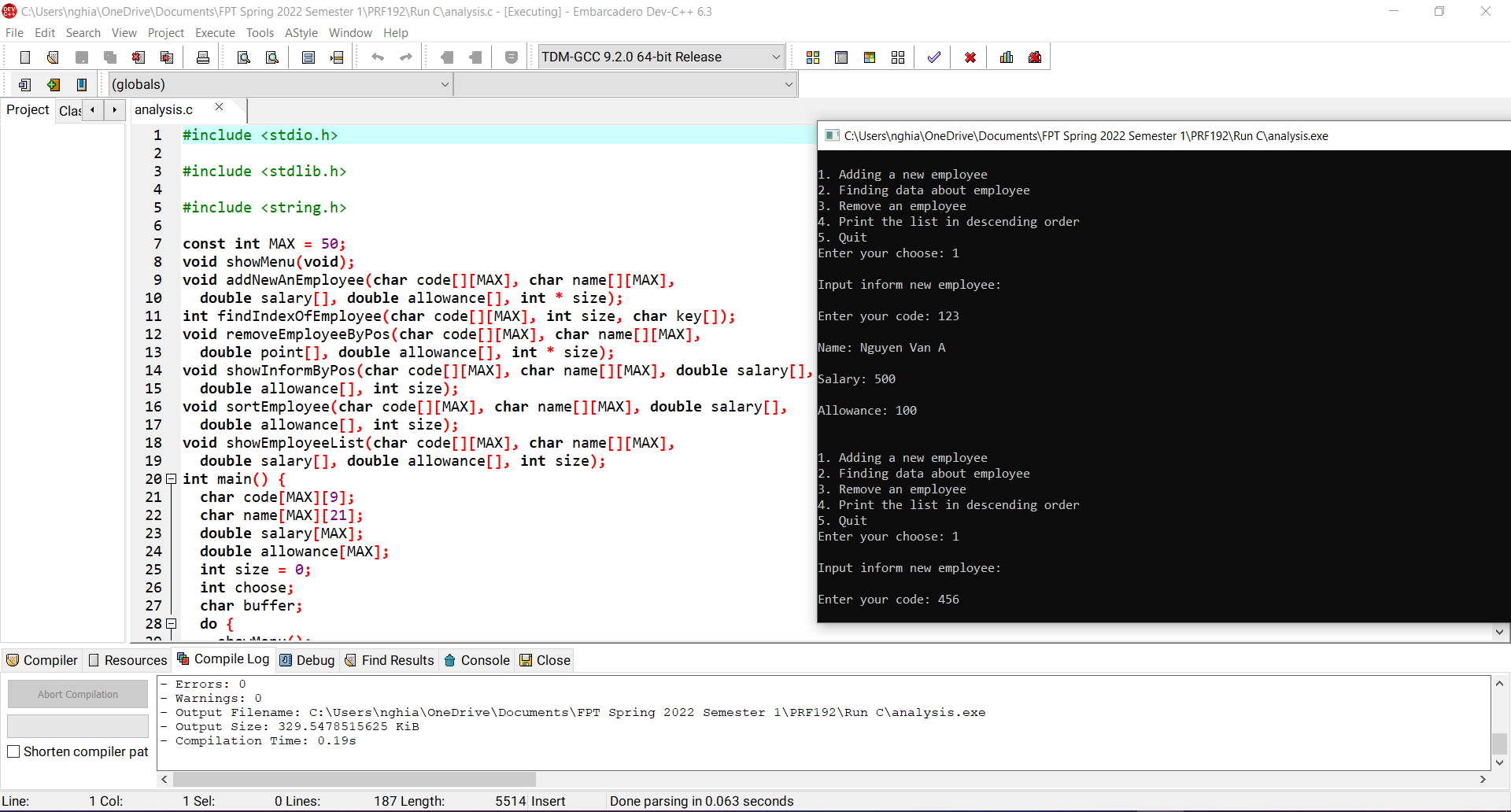


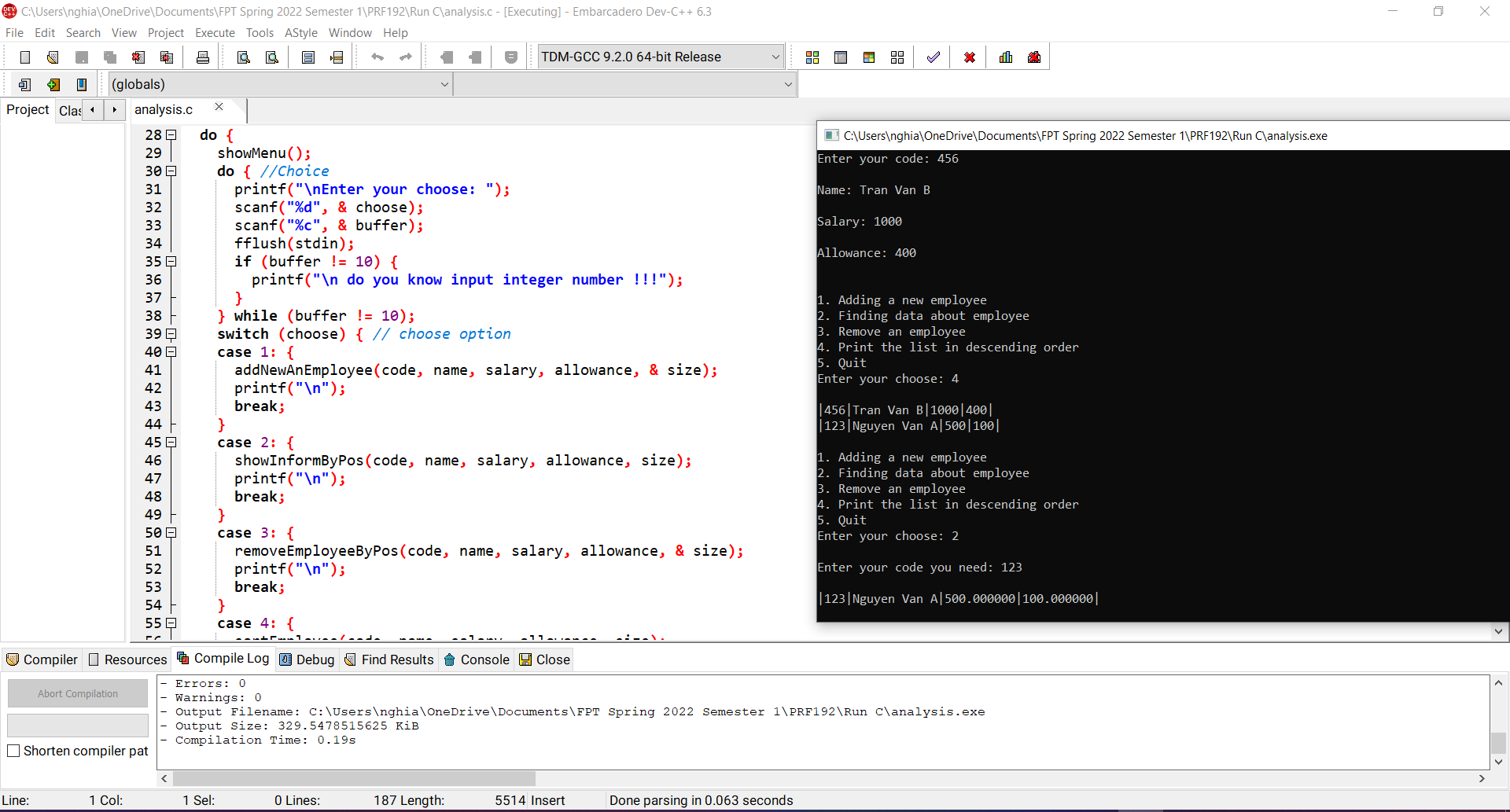


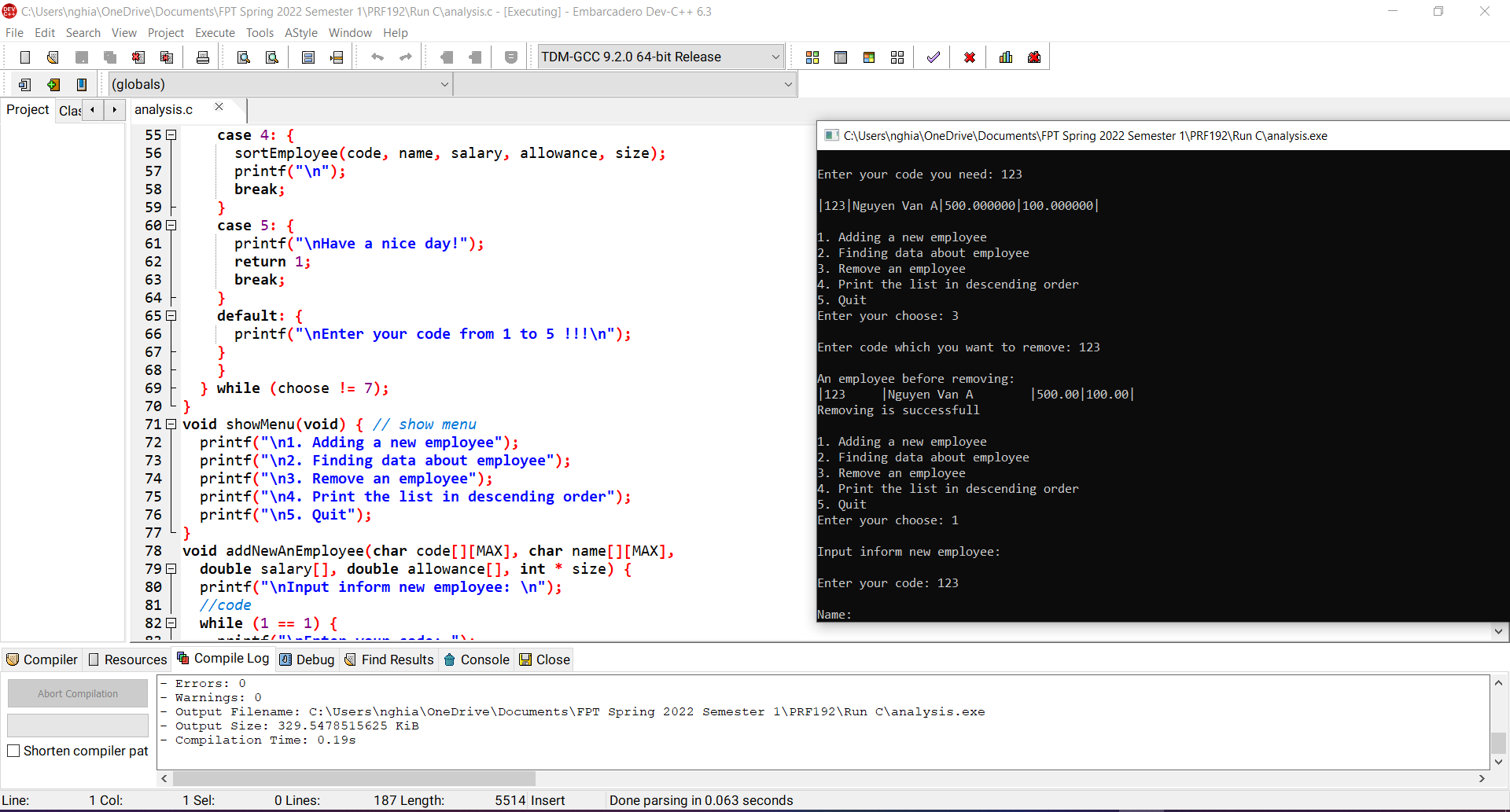
**Problem 2: (3 marks) Managing a parallel arrays**

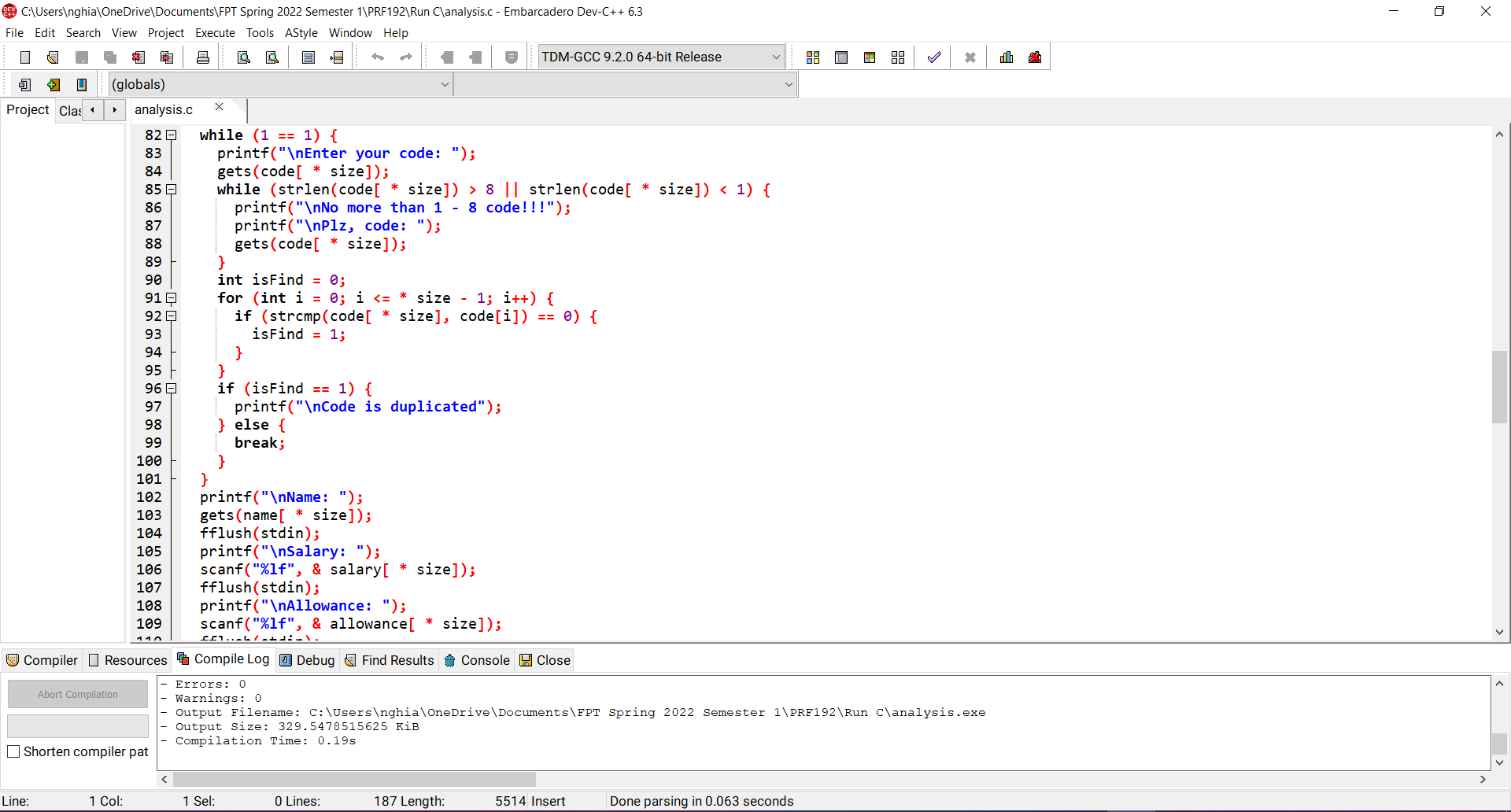
* Data about an employee: Code(char 8), name (char 20), salary(double), allowance(double)
* Develop a C-program that allows user:
  + Adding a new employee
  + Find data about employees using a name inputted.
  + Remove an employee based on a code inputted
  + Print the list in descending order based on salary + allowance.

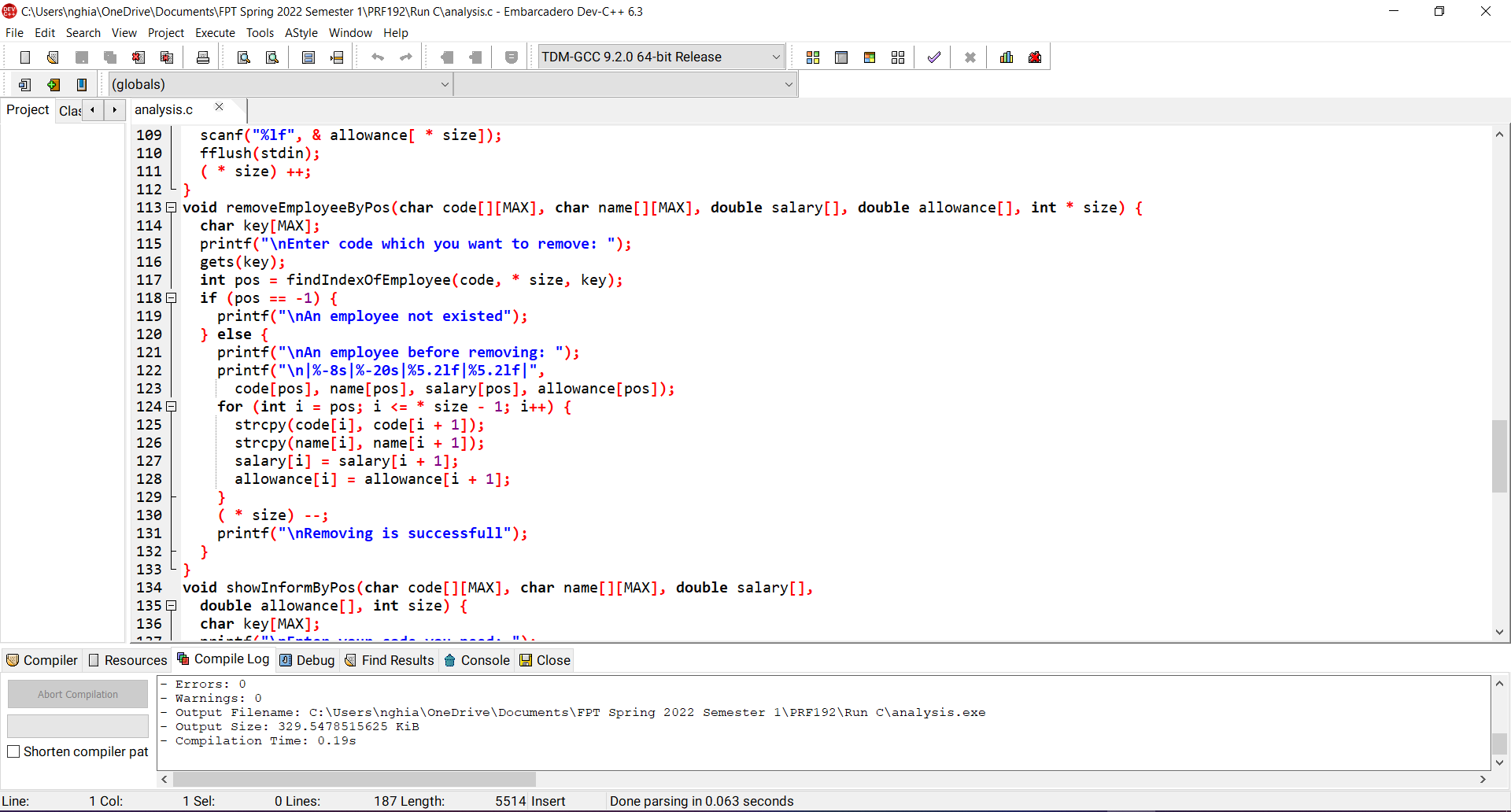
( Helps for this problem are introduced in the lecture’s slide)

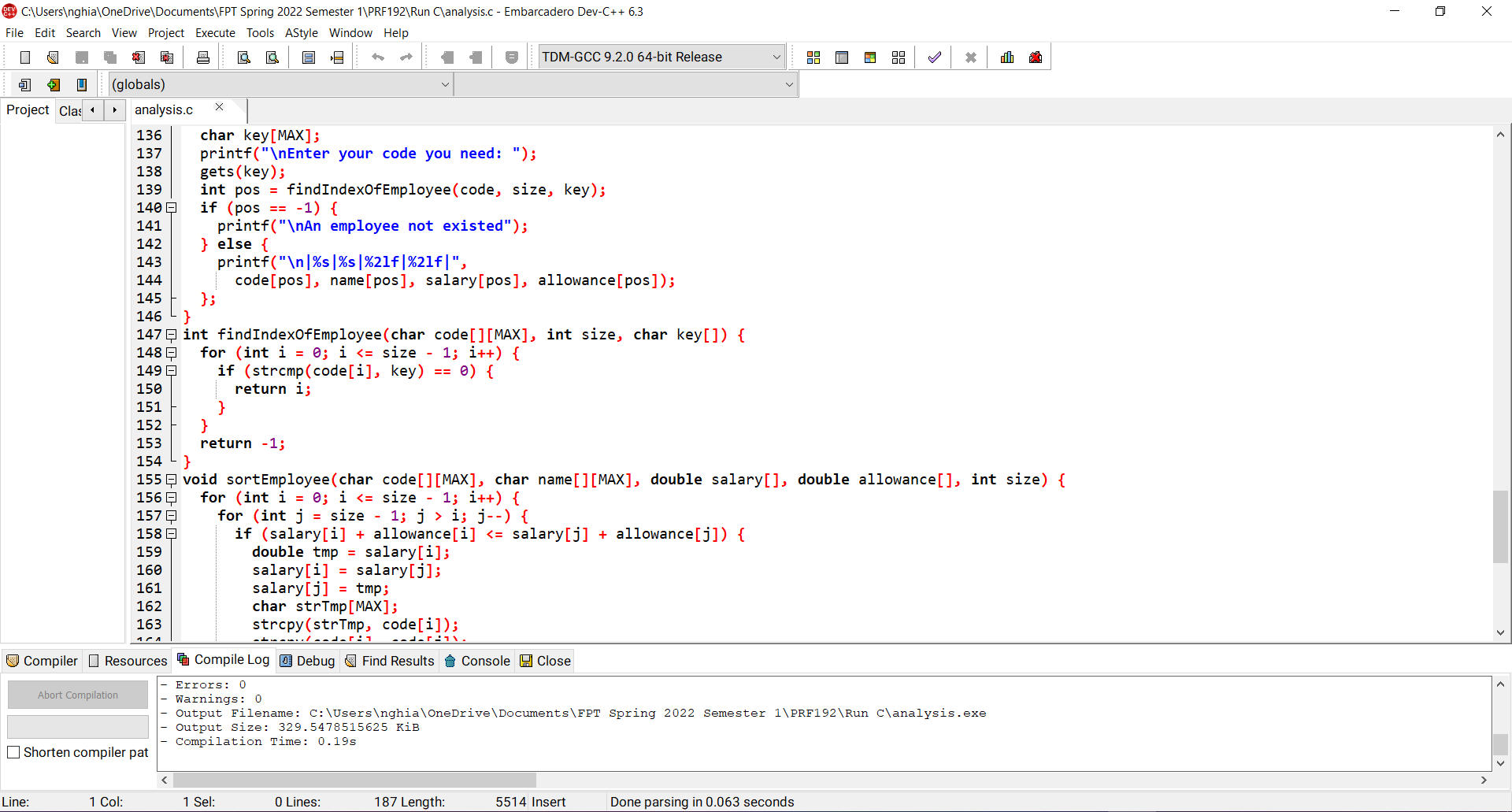


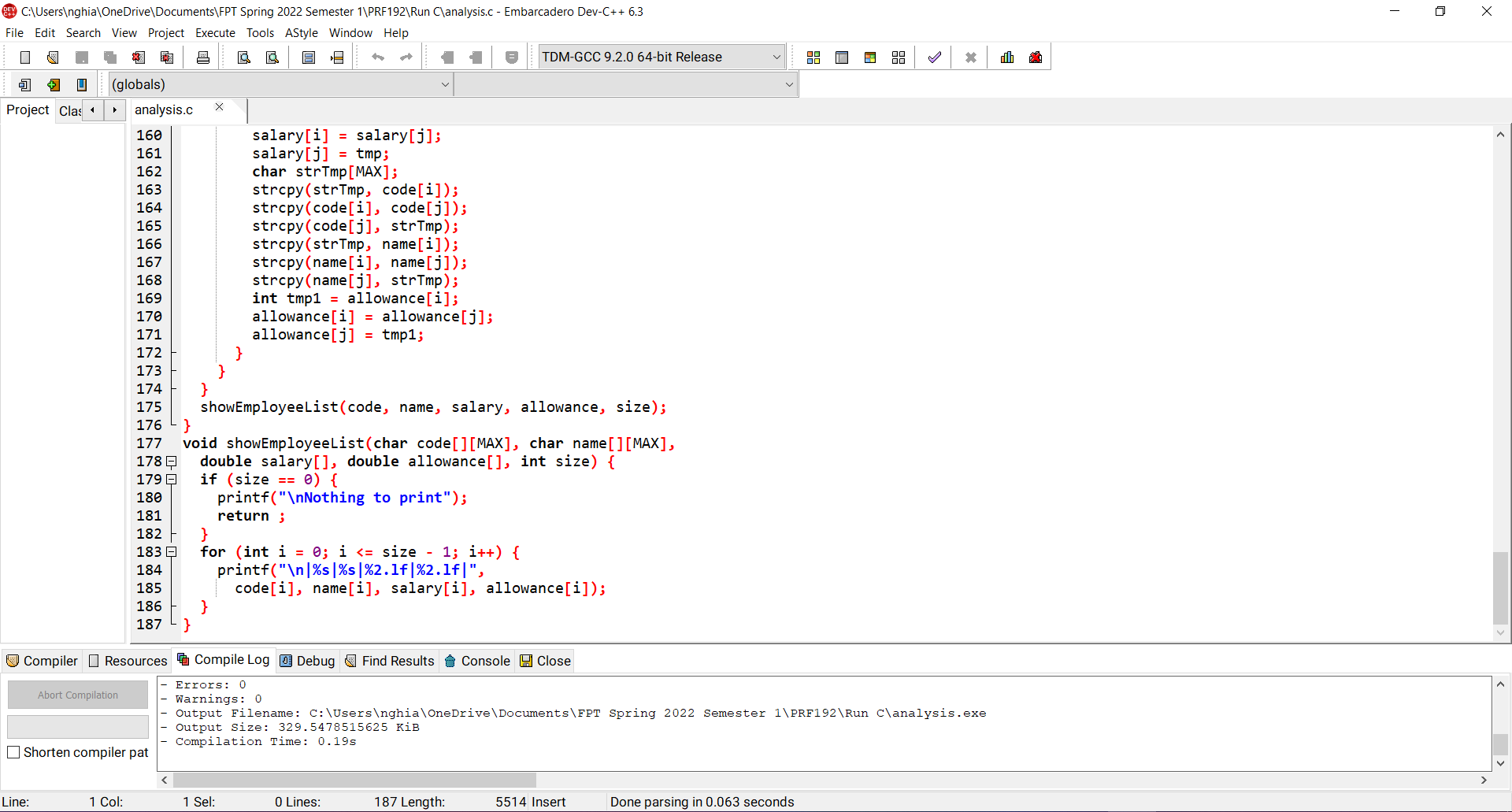




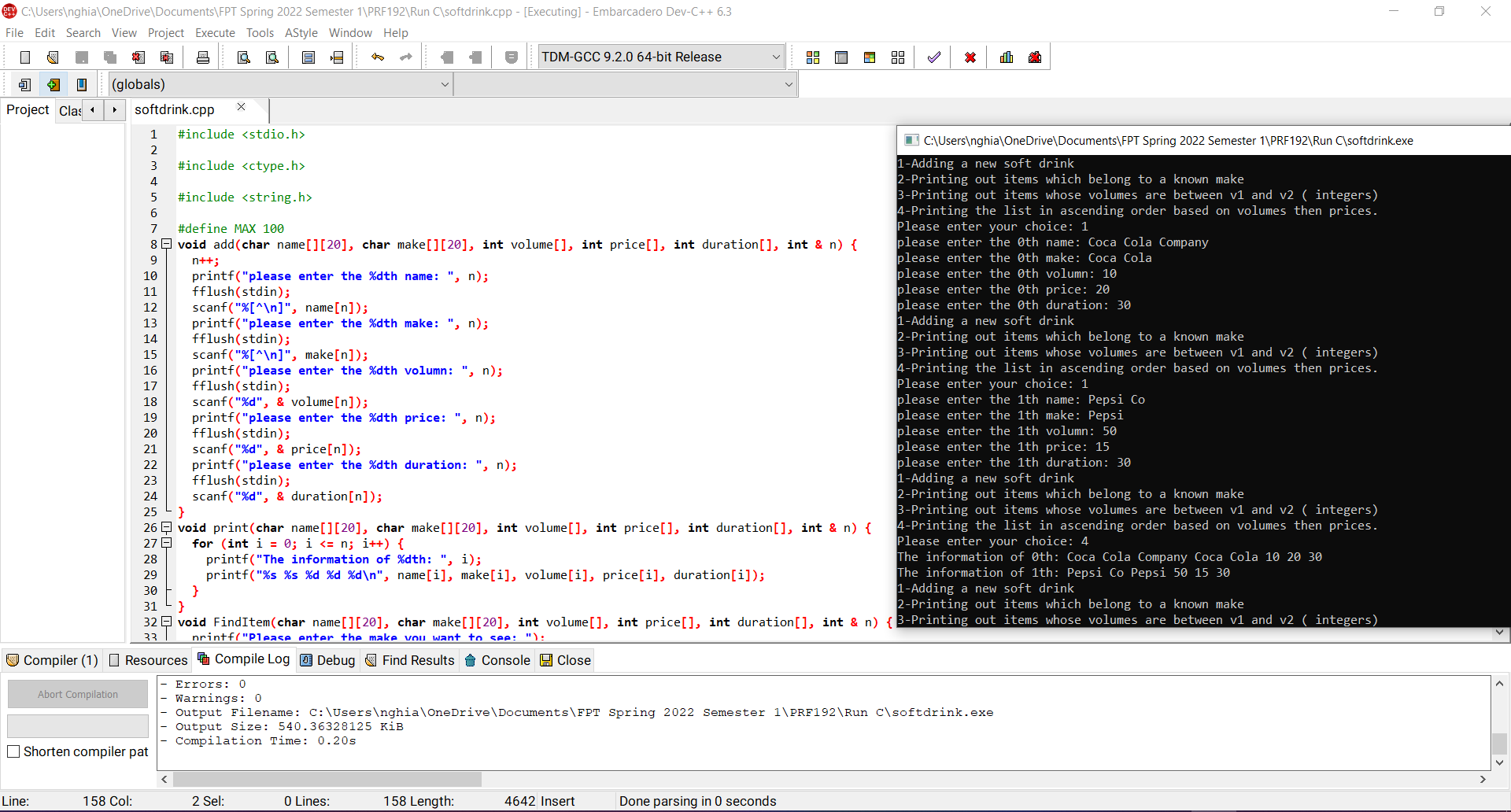
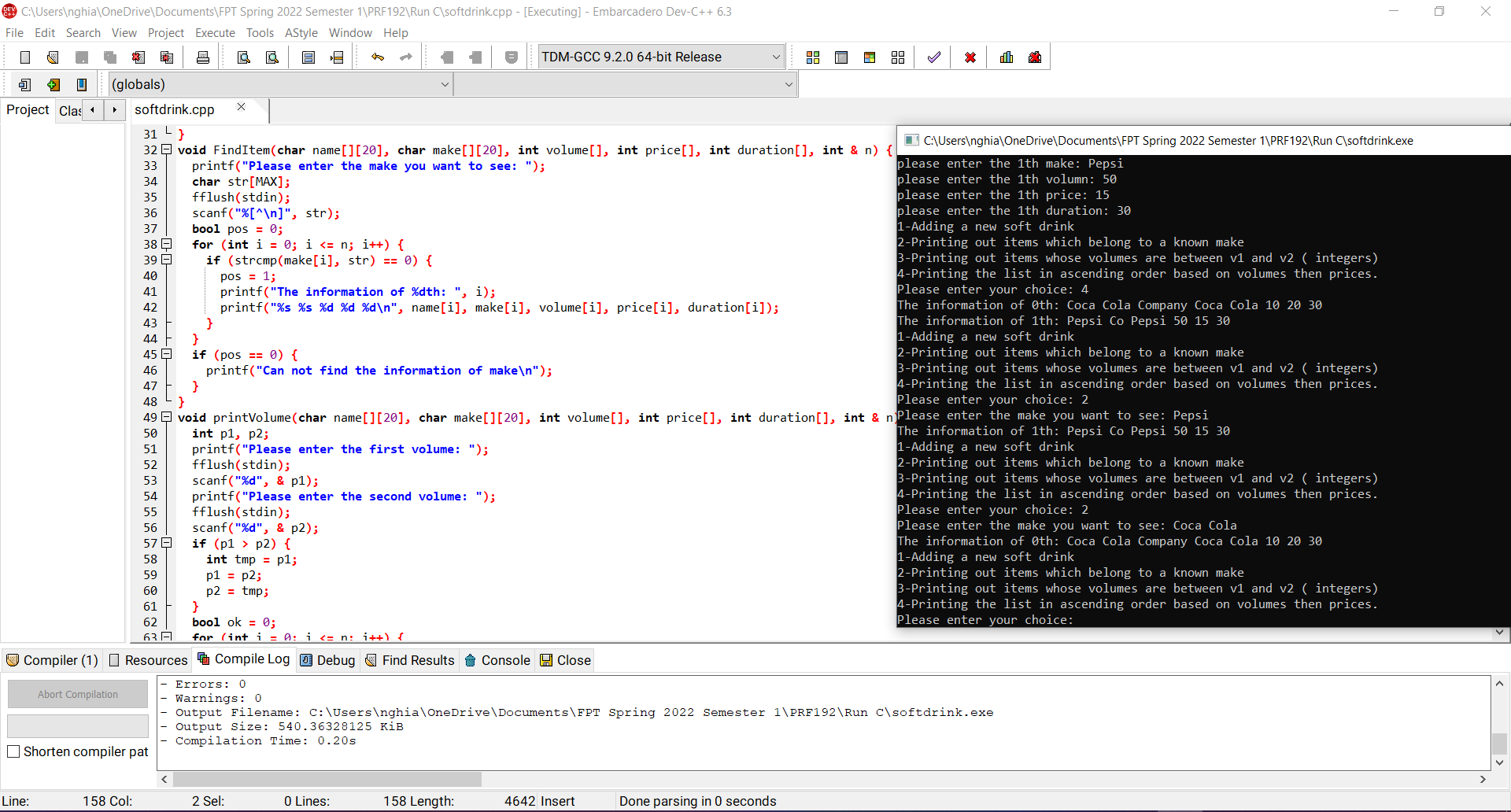
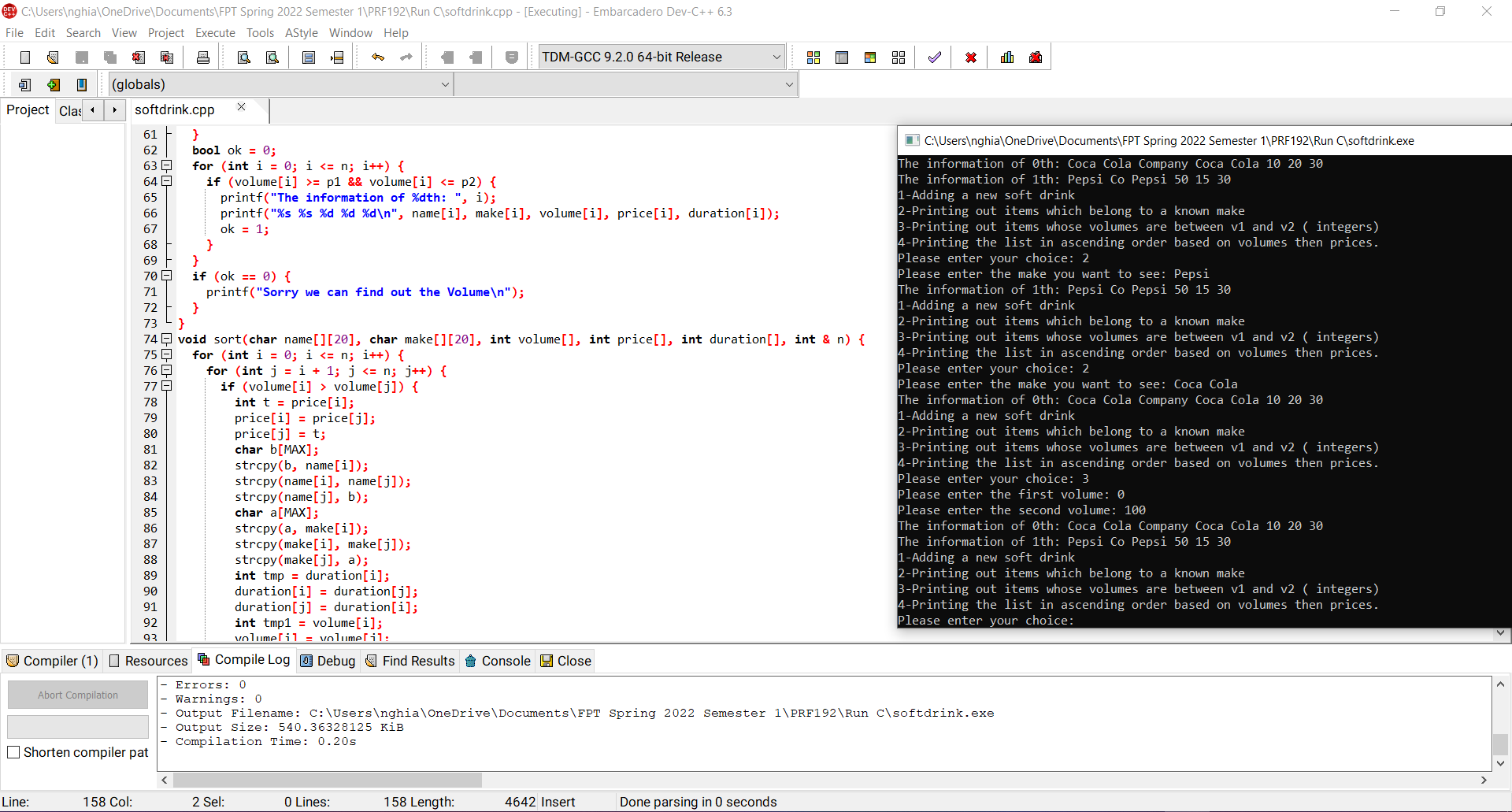
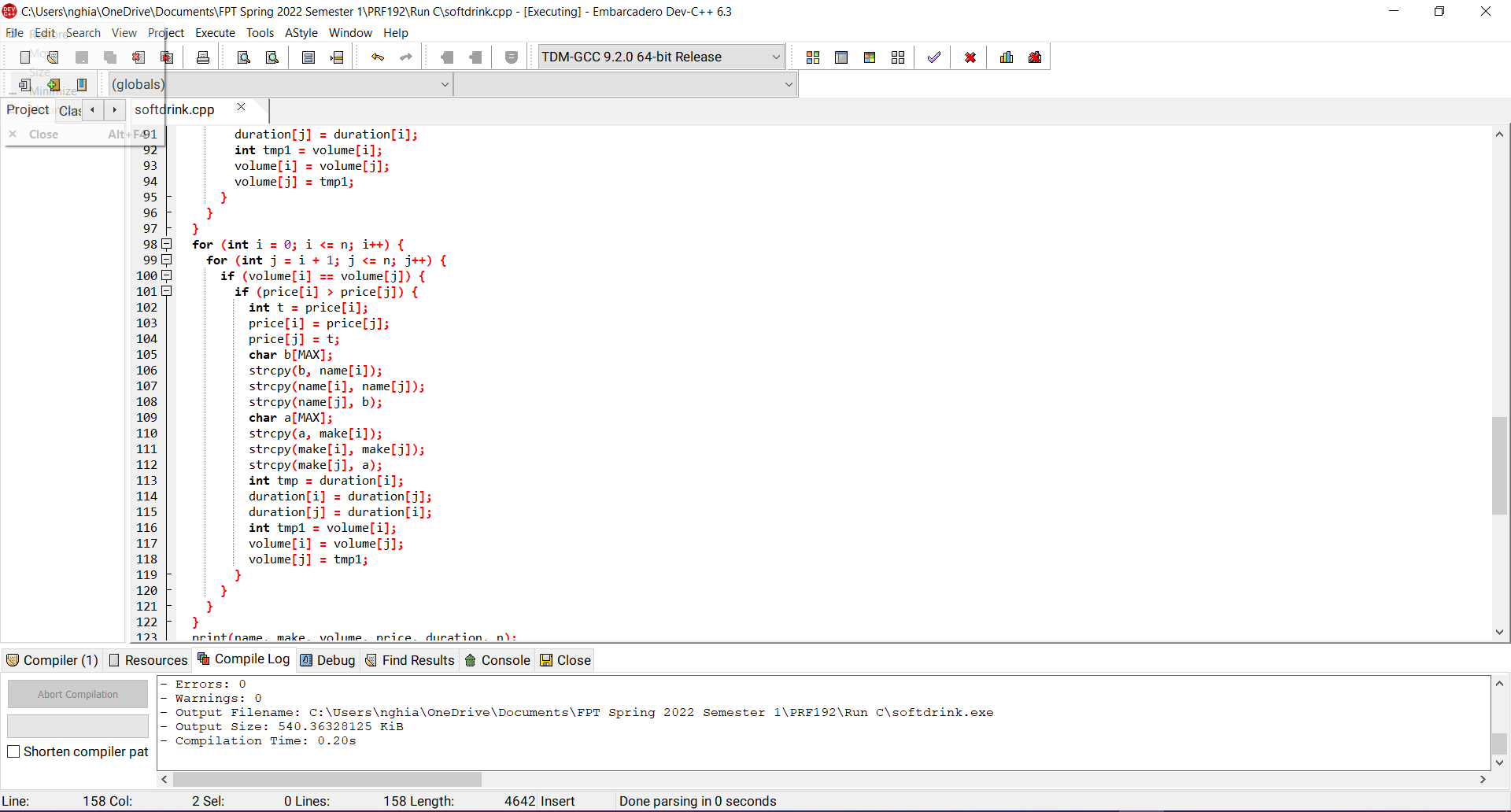
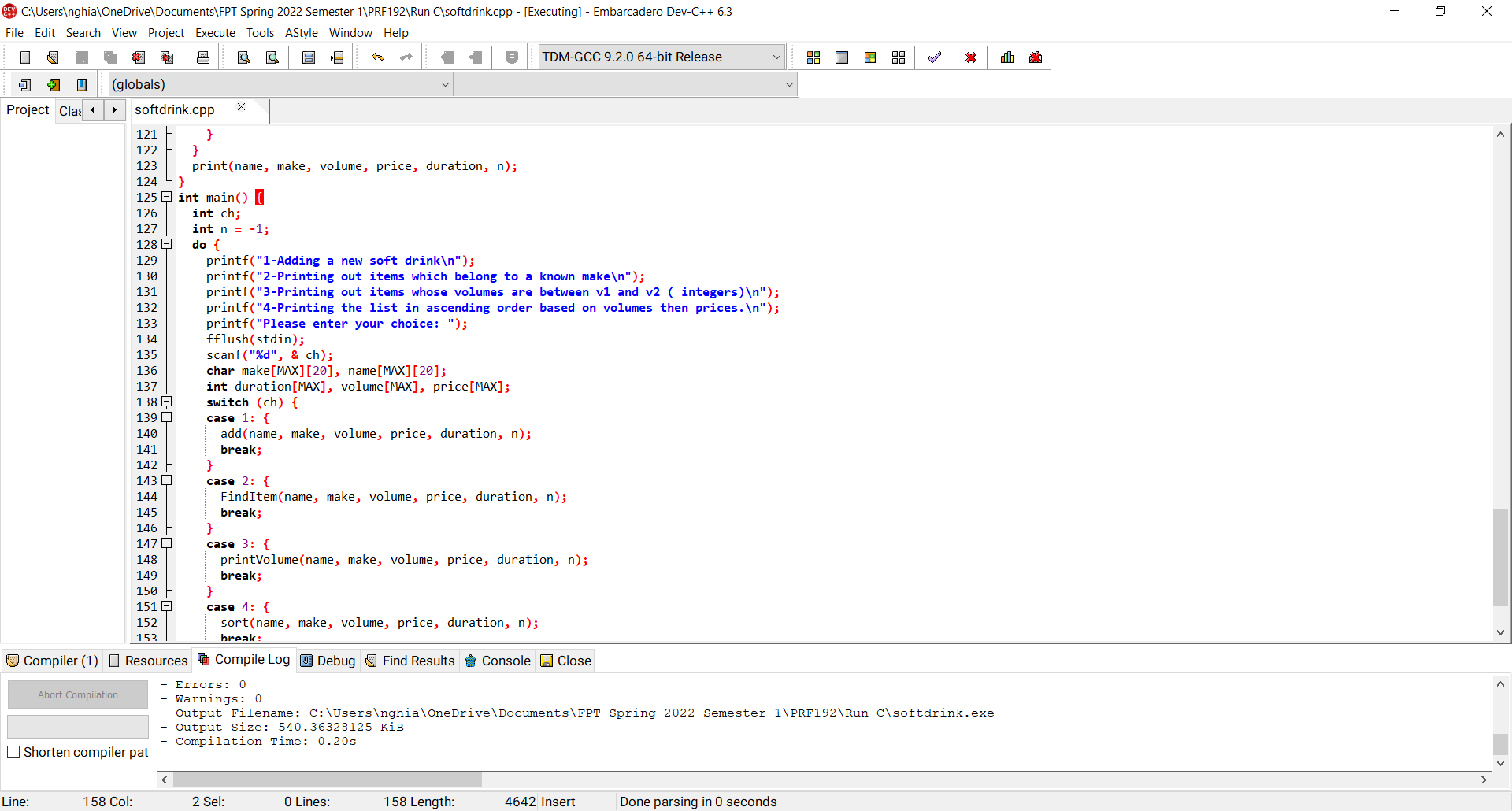








**Problem 3: (4 marks) Managing a parallel arrays**

* Data about a soft drink: name (char 20), make(char 20), volume (int), price(int), duration (int- number of days when this product can be drunk)
* Develop a C-program that allows user:
  + Adding a new soft drink
  + Printing out items which belong to a known make.
  + Printing out items whose volumes are between v1 and v2 ( integers)
  + Printing the list in ascending order based on volumes then prices.
* 
* 
* 
* 
* 
* 