- The first topic that I would like to address is the following requirement from Project 2

description:

4. [30 pts] Design and implement the program *according to the project description*. 30 pts are distributed as follows:
   a. [10 pts] Implement the move browser tab method in browserTab class.
   b. [10 pts] Implement the remove method in browserTab class.
   c. [10 pts] Change the URL on the existing tab

Letters a and b request to implement the methods to move a browser tab and to remove a browser tab in the BrowserTab class.

According to my design, which followed the design suggested on Project 1, the class WebAddress stores one url. The class BrowserTab stores a collection of WebAddresses and the main method of the program should instantiate an array called myTabs of BrowserTab objects.

From my understanding, the requirement on letter a, asks us to move in between tabs, that is change the order within the array myTabs (which obviously is not part of the class BrowserTab since it's an array of objects of this very same class!!). The document explaining the Project 2 itself gives an example of what's expected:

This project is an extension of the previous project (Project One). Make sure that you implement all the new methods as described above. The new actions are M (for Move Before), R (for Remove), and C (for Change). The input for each will be as follows (given as examples):
10 M 8 //This line means that tab 10 is moved before tab 8.
6 R   //Remove tab 6
5 C http://www.cnn.com/ //Change the url for tab 5 to http://www.cnn.com/.

Letter b asks to remove a tab. From my understanding, the only place from where I can remove a tab is from the array myTabs (which, again, obviously is not part of the class BrowserTab since it's an array of objects of this very same class!!).

Therefore, it's very unintuitive and it would be a very bad design to implement the methods requested on letters a and b within the class BrowserTab. Instead, what I did was to create a new class Browser which contains a collection of BrowserTab in an array of BrowserTab objects. As requested, I created the constructors, overloaded operators and destructors for this class. The methods to move a tab and to remove a tab were implemented in this class instead of in the BrowserTab class. The method to change the url (letter C) could be created (from my understanding) within any of the classes BrowserTabs or Browser, I created it in the BrowserTab class.

- The second topic that I would like to address is the move method. According to the explanation:

The entry "10 M 8" would mean that tab 10 goes before tab 8. So, from that I interpreted that there are 2 possibilities, instead of "10 M 8", I am going to call it "tabNumber M tabNumber2" because these are the names of the variables that I used in the code, so tabNumber goes before tabNumber2.

tabNumber is after tabNumber2

tabNumber is before tabNumber2
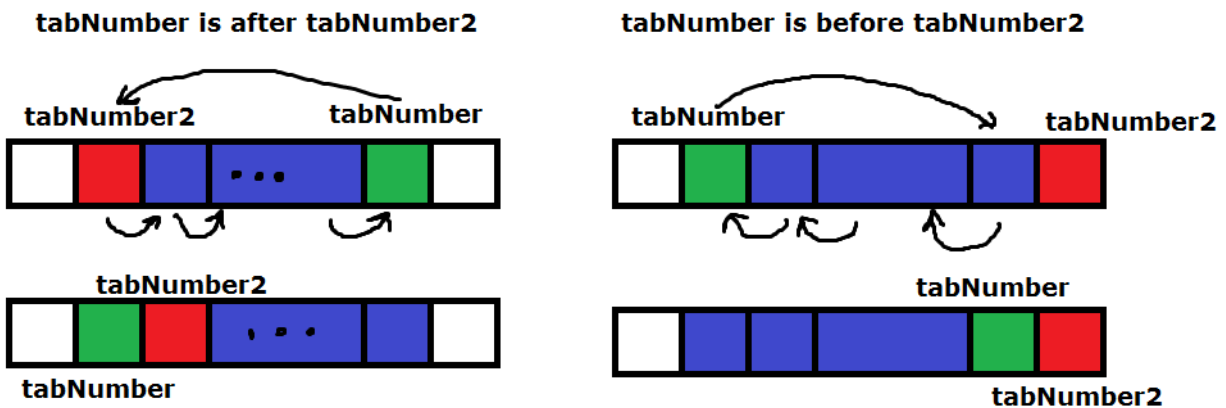
Notice that in both cases tabNumber ends up right before tabNumber2, as requested.

Also notice that when tabNumber is smaller than tabNumber2 (eg case on the right) the tab in the position tabNumber2 doesn't change its position. Therefore, if there is a sequence like:

10 P (prints the content of tab on index 10).

8 M 10 (moves tab on content 8 to right before tab on index 10. That that was on index 9 now is on index 8 and tab on index 10 doesn't change).

10 P (since the tab on index 10 didn't change, the content printed is the same).

So, the output might look tricky, but the implementation is there for the interpretation that I took from the example provided.