IT 2650
Assignment #5
Due: Monday March 6, 2017
Worth 40 points

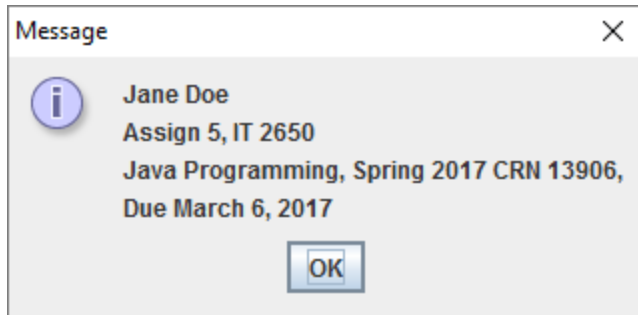There are 2 activities to be completed in Assignment #5:

1. Read Chapter 7, 8 and 9 in the Farrell text. Complete the you-do-it exercises in the
    chapters, saving your files in a folder named Chapter.07 for chapter 7 exercises,
    Chapter.08 for chapter 8 exercises, and Chapter.09 for chapter 9 exercises.   Include both
    of these folders in a Zip file named with the first letter of your first name followed by
    your last name, followed by Assign5. For example if I were doing this assignment the
    Zip file would be named jmaloneAssign5.zip.
2. The table below shows the various services offered by a hair salon, including its prices
    and times required:

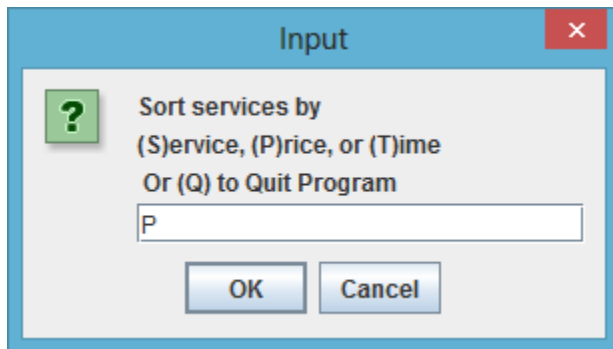| Service Description	Price ($)	Time (Minutes)
Cut	8.00	15
Shampoo	4.00	10
Manicure	18.00	30
Style	48.00	55
Permanent	18.00	35
Trim	6.00	5

a) Create a class that holds the service description, price and number of minutes it takes
    to perform the service. Include a constructor that requires arguments for all three data
    fields and three get methods that return one of the data field's values. Save the class
    as **Service.java**
b) Write an application named SalonReport that contains an array to hold six Service
    objects, and fill it with the data from the above table. Hard code the data from the
    above table into your program (**do not have your program request the user to
    input the data**).   Include methods to sort the array of Service objects in ascending
    order by each of the data fields. Prompt the user for the preferred sort order, and
    display the list of services in the requested order. Save the program as
    SalonReport.java.   The output from your program will look something like this:
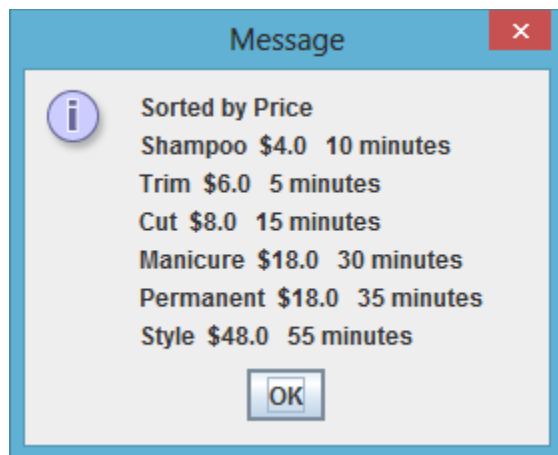
Sample output follows:

Program is started and a message box displays the programmer's info. The user clicks on OK.
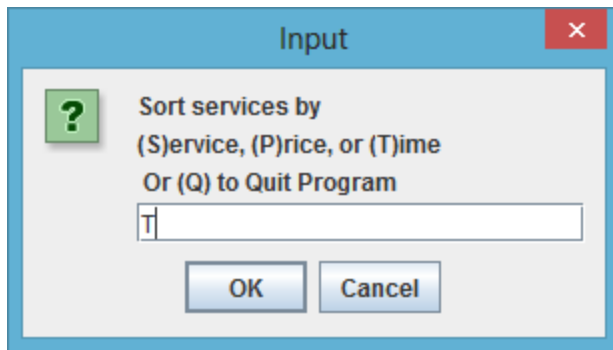
```
Message                                    ×
  (i)   Jane Doe
        Assign 5, IT 2650
        Java Programming, Spring 2017 CRN 13906,
        Due March 6, 2017
                        OK
```

Input box appears requesting a letter entry and the user types P and clicks on OK.

```
                Input                    ×
  [?]   Sort services by
        (S)ervice, (P)rice, or (T)ime
        Or (Q) to Quit Program
        P
                OK      Cancel
```

A message box appears with the services sorted by price and the user clicks on OK.

```
                Message                  ×
  (i)   Sorted by Price
        Shampoo  $4.0   10 minutes
        Trim  $6.0   5 minutes
        Cut  $8.0   15 minutes
        Manicure  $18.0   30 minutes
        Permanent  $18.0   35 minutes
        Style  $48.0   55 minutes
                OK
```

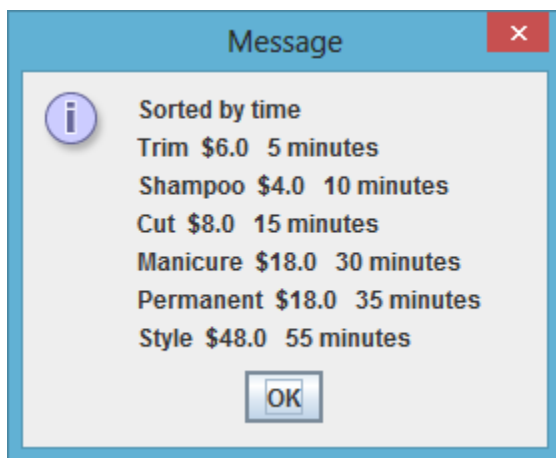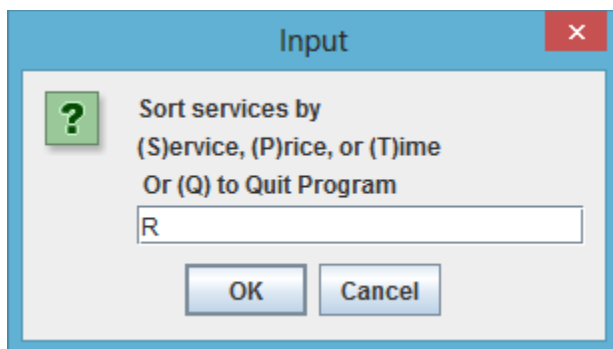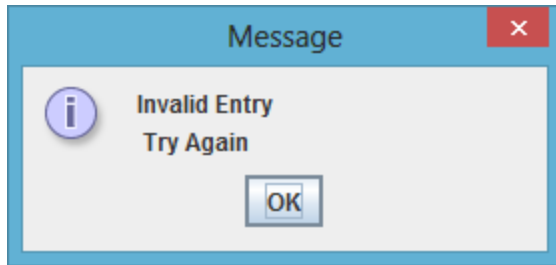The input box appears again and the user types in T this time and clicks OK

A message box appears with the services sorted by time and the user clicks on OK.
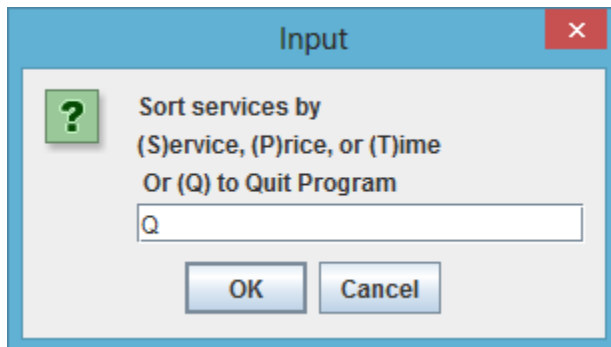

The input box appears again and the user types in R this time (an invalid entry) and clicks OK
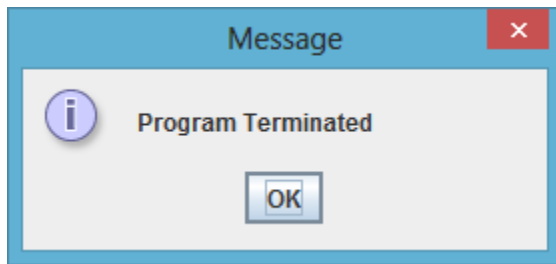

This time a message box appears with the appropriate message and the user clicks OK.

The input box appears again and the user types in Q this time (to quit the program) and clicks OK

A message box appears, the user clicks OK and the program is terminated.

The menu will continually be redisplayed until the user types in Q.

In addition to the requirements stated in the Exercise you should do the following:

- Your output for the solution should first state your name the assignment number, IT 2650 Java Programming, CRN 13906, the due date, and Spring 2017. The same information should be commented at the beginning of the source files for The Case Project. Also, use comments throughout your program where necessary (i.e. to describe logic, etc.).
- The source file becomes an important part of the documentation for any program solution. Make sure you follow indentation guidelines as demonstrated in the text. The source files should be clear and easy to read. Save all the source files from this part of the assignment in a folder named **Salon Exercise**. Include this folder in the Zip file referred to in part 1 above.

- Send the zip file to me via an attachment to email (make sure you include IT 2650 in the subject area of the email) before 12 midnight of the Due date. **Late assignments will not be graded and will receive zero points.**

Failure to follow instructions for this assignment will result in deduction of points.

IF you have any questions about the requirements of this assignment, contact the instructor by email John.Malone@Tri-c.edu or phone 216-987-2458.