Honor Code:
For all programming assignments, you must write comments at the top of each file which include the following information:
/* THIS CODE IS MY OWN WORK. IT WAS WRITTEN WITHOUT CONSULTING CODE WRITTEN BY OTHER STUDENTS OR MATERIALS OTHER THAN THIS SEMESTER'S COURSE MATERIALS. _Your_Name_Here_ */

Homework submission
Submit (Newmethod.java, Sorting.java and Deduplication.java) by Mar. 29th at the beginning of class.
Using the terminal, turn in your homework:
Put all three files in the folder CS170 or a subfolder (perhaps CS170/hw5/)
You can create a folder by running the following command (1 line per step):
1) mkdir ~/cs170/hw5
2) copy your files to the folder /home/yourNetID/cs170/hw5

Using the terminal, run:
3) cd ~/cs170/ or cd ~/cs170/hw5 (depending on where you stored your 3 files)
4) /home/cs170002/turnin-hw Sorting.java hw5a
5) /home/cs170002/turnin-hw Deduplication.java hw5b

You can submit each of the files as many times as you wish; only the last submitted version will be graded.

Problem 1: Sort arbitrary numbers (50 pts)
Create a Java program and name it Sorting.java.
This program read arbitrary integers from command line. Every time the system prompts message "Enter a number", and then read one number from command line. When user enters 0, the program find, sort and output first all odd integers in ascending order and then find, sort and output all even integers in descending order (Assume all inputs are positive integers).
Example 1:
java Sorting
Enter a number = 3
Enter a number = 2
Enter a number = 9
Enter a number = 7
Enter a number = 8
Enter a number = 6
Enter a number = 0
Odd numbers = 3 7 9
Even numbers = 8 6 2

Hints:
You may reuse example codes and create methods to handle different tasks.
We learned how to make a program read arbitrary inputs. (hw4-problem1)
It is possible to extend a fixed array:
http://www.mathcs.emory.edu/~cheung/Courses/170/Syllabus/09/copy-array.html
You can reuse the code of selection sorting algorithm.
http://www.mathcs.emory.edu/~cheung/Courses/170/Syllabus/09/sel-sort.html

Problem 2: Deduplication (50 pts)
Create a Java program and name it Deduplication.java.
This program reads a list of strings (delimited by a comma) as command line arguments (http://www.mathcs.emory.edu/~cheung/Courses/170/Syllabus/09/command-args.html) of the program. System outputs the deduplicated list, which doesn't contain repeated strings.
Example:
(on your command line:)
javac Deduplication.java
Example 1:
java Deduplication ABC abc AB AA bb abc AA
 output = ABC abc AB AA bb
Example 2:
java Deduplication hello world hi what is there book store book world
 output = hello world hi what is there book store