

Northeastern Illinois University
CS 200: Programming I
Professor Yehuda Gutstein
Homework

Please zip all HW files, including source files (.java) and results (.txt) for this week in ONE folder and submit on D2L.

HW is due prior to the start of the next class.

At the beginning of each .java file, please include (in comments):

```
//CS200
//(insert here: Semester, Year)
//Student Name
//Instructor: Y. Gutstein
//HW #x: (Name of HW)
//Due: (insert due date here)
//File name: (Insert FileName).java
```

HW #1: Methods

Create a new .java file named SortNumbers.java.

Write a method that has the following header:

```
public static void displaySortedNumbers(int a, int b, int c)
```

The method should display three numbers in increasing order.

In the main method, ask the user to enter three numbers. Use/invoke the displaySortedNumbers method to display the entered numbers in order.

Your output should match the sample output below.

```
Enter a number: 10
Enter a number: 3
Enter a number: 17
3 10 17
```

```
Enter a number: 4
Enter a number: -6
Enter a number: -8
-8 -6 4
```

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HW #2: Methods

Open the .java file named Operations.java from the Needed Files folder provided for you.

Write two methods named multiply and divide. The methods should have the following headers:

```
public static int multiply(int a, int b)
public static int divide(int a, int b)
```

The multiply method should multiply the parameter a by the parameter b. However, you may not use the multiplication operator (*). You may only use the existing methods of add or subtract.

The divide method should use integer division to divide the parameter a by the parameter b. However, you may not use the multiplication operator (*), the division operator (/) or the mod (%) operator.

After you complete the multiply and divide methods, uncomment the commented lines in the main method.

If you wrote the methods correctly, your output should match the sample output below.

Hint for the multiply method: A for-loop may come in handy.

Hint for the divide method: A while-loop may come in handy.

34 * 67 is 2278
3729 / 2 is 169