**Java**

**Array of Doubles**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DIRECTIONS:** Create a program that contains an array of 10 doubles with the following options.

**1) Find Sum and Average**

Create a method that returns a double that finds the sum

double sum(double[] numbers)

Create a method that returns a double that finds the average

double average(double[] numbers)

Print the results

**2) Find Minimum**

Create a method that returns a double that finds the minimum

double minimum(double[] numbers)

Print the result

**3) Find Maximum**

Create a method that returns a double that finds the maximum

double maximum(double[] numbers)

Print the result

**4) Change All Values**

Ask the user if they want to reset the array to all 0, or enter all new values

**5) Change One Value**

Ask the user for the index, and then the value to put in that index

**6) Quit :(**

**Extra Fun Parts:**

**1)** Instead of having a set size of 10, have the user enter the size of the array.

**2)** Add a menu option to change the size of the array.

For example. If the array started with 3 value in it

7 10 3

And the user wanted to change the size to 5. The array would look like this:

7 10 3 0 0

If the array started with 3 value in it

7 10 3

And the user wanted to change the size to 2. The array would look like this:

7 10