**Java**

2D Array

**Create a program that contains a 2D array of ints with the following menu options:**

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

**When the program starts, ask the user for the size of the array.**

**Your program should look like this:**

Enter number of rows: 10

Enter number of columns: 8

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 1

All Same (1) or All Different (2): 1

Enter Row: 3

Enter Value: 5

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 1

All Same (1) or All Different (2): 2

Enter Row: 3

Enter Value for Row 3 Column 1: 2

Enter Value for Row 3 Column 2: 3

Enter Value for Row 3 Column 3: 4

Enter Value for Row 3 Column 4: 5

Enter Value for Row 3 Column 5: 6

Enter Value for Row 3 Column 6: 7

Enter Value for Row 3 Column 7: 8

Enter Value for Row 3 Column 8: 9

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 3

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

5 5 5 5 5 5 5 5

2 3 4 5 6 7 8 9

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 4

What Value Would You Like To Find? 4

The Value 4 Is In Row 4 Column 3

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 4

What Value Would You Like To Find: 99

99 Is Not In The Array

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 4

What Value Would You Like To Find? 5

The Value 5 Is In Row 3 Column 1, Row 3 Column 2, Row 3 Column 3,

Row 3 Column 4, Row 3 Column 5, Row 3 Column 6, Row 3 Column 7,

Row 3 Column 8, and Row 4 Column 4

1) Change A Row

2)Change A Column

3) Print Values

4) Find A Value

5) Average A Row

6) Average A column

Enter Choice (0 To Quit): 0

**Now, instead instead of the options to print the array, sum, and average. Always print all three.** You may need to find a way to only print out a few digits of a double to make this look good.

**For example, if the user chose a 3 x 3 array, your output should look like this:**

1 2 3 Sum Avg

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1 1 2 3 6 2

2 5 5 5 15 5

3 10 8 6 24 8

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Sum 16 15 14

Avg 5.3 5 4.6

1) Change A Row

2)Change A Column

3) Find A Value

Enter Choice (0 To Quit):