2D Array Quiz ASC Tutoring - Tutor: Branden Sammons Name:

Recently you have talked about 2d arrays in class and have a rough understanding of how they work. This short quiz will hopefully help you work on your paper coding as well as help you understand 2d arrays better.

When envisioning a 2d array I think of a 2d grid in an excel format with size [n][m].

[0] [0]	[0] [1]	 [0] [m - 2]	[0] [m - 2]
[1] [0]	[1] [1]	 [1] [m - 2]	[1] [m - 1]
[n - 2] [0]	[n - 2] [1]	 [n-2] [m - 2]	[n-2] [m - 1]
[n - 1] [0]	[n - 1] [1]	 [n-1] [m - 2]	[n-1] [m - 1]

So we are going to do some practice working with such arrays. First off we need to construct a function that will return a complete 2d array with the properly filled out multiplication table up till the number specified.

So if given 2 the function should return a 2x2 array with the completed multiplication table for 2 where (1,1) is holding $2 \times 2 = 4$.

public		_multiplicationTable(int size) {
	// Your code here	

} // end bracket for multiplicationTable()

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Next we need to be able to print out this table. Please construct a function that will print out a 2d array in the form:

```
number (tab) number (tab) number
number (tab) number (tab) number
For the size n, m. Note: Use println() in spot for system.out.println()
public void print2d( int array[][] ) {
    // Your code here
```

```
} // end bracket for print2d()
```

// Answer here

Now that we have a way to print out please write down what the following code will print out.

```
public static void main() {
    int array[][];
    array = multiplicationTable(5);
    print2d( array );
} // end main()
```