

2D Array Practice

Name: Key 2/6/20

1. What prints when the following code executes? <pre>int[][] arr = new int[3][10]; System.out.println(arr[2][9]);</pre> 0	2. What prints when the following code executes? <pre>int[][] arr = { {3,4,5,6}, {7,8,9,0} }; System.out.println(arr[1][2]);</pre> 9
3. What prints when the following code executes? <pre>int[][] arr = { {3,4,5,6}, {7,8,9,0} }; System.out.println(arr[0].length);</pre> 4	4. What prints when the following code executes? <pre>int[][] arr = new int[3][10]; System.out.println(arr.length);</pre> 3
5. What prints when the following code executes? <pre>String[][] arr = new String[5][2]; System.out.println(arr[3][1]);</pre> null	6. What prints when the following code executes? <pre>String[][] arr = new String[5][2]; System.out.println(arr[5][1]);</pre> Array Index Out of Bounds Exception: 5

There is a back, but please don't try to do it until we've done our notes for today (8.2: Traversing Arrays).

(wait to do this side until we have completed our notes on section 8.2)

7. Complete the following code which is meant to print any 2D integer array regardless of size.

```
public static void printArray(int[][] x)
{
    for (int r = 0; r < x.length; r++)
    {
        for (int c = 0; c < x[r].length; c++)
        {
            s.o.p(x[r][c] + " ");
        }
        System.out.println();
    }
}
```

8. Complete the following code which is meant to find and return the longest String in a 2D String array:

```
public static String findLongest(String[][] x)
{
    String longest = x[0][0];
    for (String[] row : x)
    {
        for (String c : row)
        {
            if (c.length() > longest.length())
            {
                longest = c;
            }
        }
    }
    return longest;
}
```