

Code you cannot see creates an int array **nums** that contains this data:

```
1 2 3 4 5
6 7 8 9 0
```

1. Write one line of code to print the 3 from array **nums**.

2. Write one line of code to replace the value 0 with the value 10 in the array **nums**.

3. What does "row major" mean when we're talking about 2D arrays?

4. In code you cannot see I created a 2D array named "mystery". Write code to print how many elements are in the array:

5. What is wrong with the following code?

```
String[][] words = //array filled with valid data;
String longest = words[0];
for(String w: words) {
    if(w.length()>longest) longest = w;
}
System.out.println("Longest String: "+longest);
```

6. Write code using enhanced for loops to print a 2D double array **values** with a space after each element, printed in a grid like we've done this whole unit.

```
double[][] values = //properly declared
```

7. Write code using regular for loops to print a 2D int array **nums** with a space after each element, printed in a grid like we've done this whole unit.

```
int[][] nums = //properly declared
```

8. Write a method named `charCount()` that accepts any 2D String array and returns the sum of all of the lengths of all Strings in the array. For example, if the array contained `{{"cat","dog"}, {"pig","cow"}}` this method would return 12.

```
public static int charCount(String[][] x)
{

}

}
```

9. Write a method `biggestValue()` which accepts any 2D double array **nums** and returns the column index that has the largest value.

```
public static int biggestValue(double[][] nums)
{

}

}
```

10. Using an array initializer, create a 2D integer array named **values** that contains the information shown to the right arranged as shown in four rows of two columns.

```
3 4
5 6
9 8
7 6
```

11. Write a line that prints the 8 from **values** from the array in the previous problem.