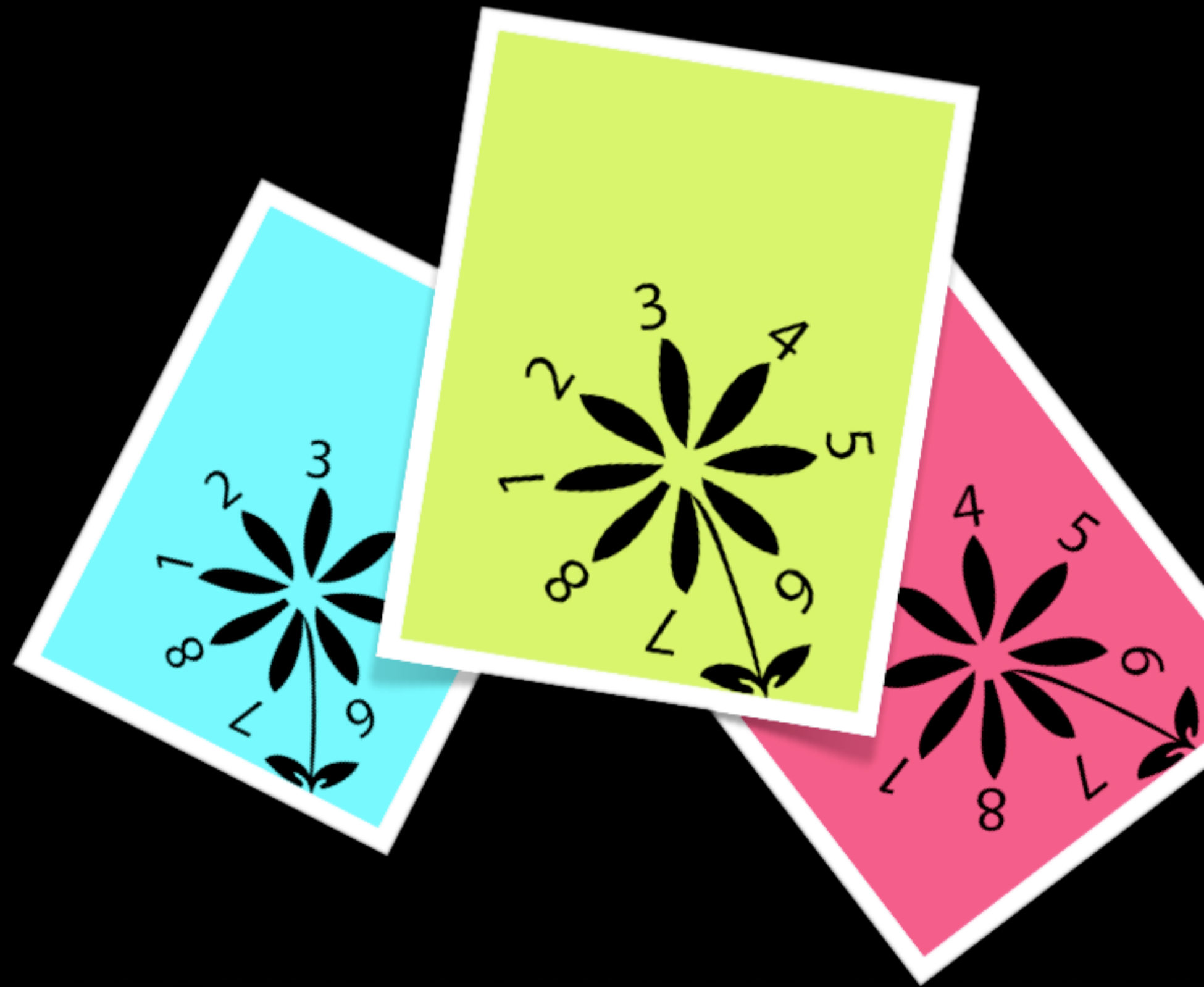Lecture: Author: Instructor, Leigh Cotnoir

Arrays within arrays . . . .

The Multidimensional Array

So, what is a multidimensional array?

‣ A multidimensional array is **an array that contains at least one nested array as a value to a key.** They are basically arrays within arrays.

Here's how we could declare a multidimensional array:

- $fruit = array
  (
    "citrus" => array("oranges", "lemons", "limes"),
    "melons" => array("watermelon", "galia", "casaba"),
    "berries" => array("currant", "raspberry", "blueberry")
  );

Let's look at an illustrative table format in the next slide.

$fruit	[0]	[1]	[2]
[citrus]	oranges	lemons	limes
[melons]	watermelon	galia	casaba
[berries]	currant	raspberry	blueberry

‣ The side row headings are the top-level keys in the array.

‣ The columns are the values to those keys, which are held in nested arrays.

$fruit	[0] array	[1] array	[2] array
[citrus]	oranges	lemons	limes
[melons]	watermelon	galia	casaba
[berries]	currant	raspberry	blueberry

‣ So if we wanted to grab the value of "blueberry," you could use the following command:

```
echo $fruit['berries'][2];
```

You can practice with multidimensional arrays using the print_r() function.

If you want to jump forward to see how we can access these arrays with loops, you can look at the Loops lecture.