Announcements

• Term paper due today (please put it on the table)
  – Turn in on Friday with 20 point penalty
• Project #4 due tomorrow (Thursday)
• Exam #2 on Monday
Quiz #4 Solutions
More about Arrays

We know how to create an array:

```javascript
var a = [0, 4, 9, 1, 6];
```

A way to create an empty array:

```javascript
var a = new Array(5);
```
2-Dimensional Arrays

Regular array:

Can we create structures like these?
2-Dimensional Arrays

JavaScript does not have “built-in” 2D arrays

You can create an array of arrays:

```javascript
var a = [ [7, 3, 1, 2], [6, 8], [0, 4, 9, 1, 6] ];
```

How do we access each element?

a[0][2] = ?
a[2][4] = ?
What is the value of this expression:  \( a.length \)

What expression gives us the length of a particular row?

How can we process all elements in the structure?

```javascript
for (var r = 0; r < a.length; r = r + 1) {
    for (var c = 0; c < a[r].length; c = c + 1) {
        ... a[r][c]...
    }
}
```

Examples: TwoDimensionalArrays1.html, MegaTurkey.html
2-Dimensional Arrays

Can be manipulated just like regular arrays

- push
- pop
- shift
- unshift

Example: TwoDimensionalArrays2.html