Announcements

• Project #2 has been posted
• Term Paper assignment has been posted
Strings

A *string* is a sequence of characters (symbols)

Use quotes (" " ) or single quotes (‘ ’):

– “This is a string”
– ‘This is a string’

Use + to *concatenate* (join) strings:

– “This” + “ is “ + “a string”
Arithmetic Operators

- +
- -
- *
- /

All work as expected!
Variables

- Memory location with a name.
- Used to store a value
- Values can be numbers, strings, or objects
- Always use “var” to create a local variable
- Use assignment operator (=) to assign a value to a variable.

```javascript
var x;
x = 77;

var y = 22;
var z = 18.95;
var s = "Hello there.";
```

Example: VariablesOutput.html
Names of Variables

Rules

• May use letters, digits, underscore ‘_’
• First character may not be a digit
• Avoid “reserved” words: alert, prompt, many others

Proper Style

• Use “Camel Case”:
  – Lower-case letters
  – First letter of subsequent words capitalized
  – Examples of camel-case variable names:
    • temperature
    • userInput
    • numberOfPlayers
    • columnNumber
Names of Variables

Choose meaningful names:

<table>
<thead>
<tr>
<th>Good names</th>
<th>Bad names</th>
</tr>
</thead>
<tbody>
<tr>
<td>temperature</td>
<td>temp</td>
</tr>
<tr>
<td>shoeSize</td>
<td>sSize</td>
</tr>
<tr>
<td>row</td>
<td>r</td>
</tr>
<tr>
<td>maximumWidth</td>
<td>max</td>
</tr>
<tr>
<td>maxWidth</td>
<td>maxW</td>
</tr>
</tbody>
</table>
Input

Use `prompt` function for basic dialog box:

```javascript
name = prompt("What is your name?");
```

Result will always be a string.

Example: Input.html
Type Conversions

Usually JavaScript automatically converts things:

```javascript
string1 = "40";
string2 = "30";
product = string1 * string2;  // multiplying???
```

It doesn’t always work out...

Example: NumberConversion1.html

To convert from string to number:

```
Number("40")  // This is equal to the number 40
```

Example: NumberConversion2.html