

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.

```
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:

Good names	Bad names
temperature	temp
shoeSize	sSize
row	r
maximumWidth maxWidth	max maxW

Input

Use *prompt* function for basic dialog box:

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

Result will always be a string.

Example: [Input.html](#)

Type Conversions

Usually JavaScript automatically converts things:

```
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](#)