ANNOUNCEMENTS

- No posting of code in the forum
- Check class announcements daily
INTRODUCTION TO FUNCTIONS

- Function ➔ An entity that completes a particular task for us
- It can take values necessary to complete a particular task
- After completing a task it returns to the point after the call
- Examples of JavaScript functions
  - `document.writeln`
  - `alert()`
- You can define your own functions.
- Order of declaration is immaterial
- **Example:** Functions.html
INTRODUCTION TO FUNCTIONS

- General form of a function is:

  \[
  \text{function name (} <\text{comma-separated list of parameters}> \text{)} \{ \\
  \text{statements} \\
  \}
  \]

- Functions are invoked (called) by using the () operator
- A function can receive values via parameters
  - We do not use var for parameters
- A function may return a value
- There are other approaches to define functions
SCOPE OF VARIABLES

- Variables declared in a function are called local variables.
- They are created on entry to the function and destroyed on exit.
- You can use the same name in different functions as they are different variables.
- Variables declared outside of a function are called global variables.
A function can return a value via the return statement
\[\text{return expression;}\]
A call to a function that returns a value can be used as an expression
The function execution terminates when a return statement is executed
A return statement with no return value terminates the function execution
Can we return more than one value?
Example: FunctionReturn.html
Can we reduce the code for the maxValue function?
What if we want to compute the maximum of more than two values?
Advantages of functions are:

- Allows you to factor out common code
- Allows you to reuse code
- Allows you to control the code complexity

While designing a solution to a problem you can divide a problem into sub-problems each represented by a function.
The organization for code dealing with functions will be as specified in the following example

**Example:** MainFunction.html
GLOBAL VARIABLES

- Global Variables → variables defined outside of any function
- We want to avoid using global variables. Why?