Head First into JavaScript

Chapter 3: Getting Functional

* Functions give you the power to write code that can be reused, is manageable and can be abstracted
* Function name(param, param) {}
  + Variable names used with function will match names given to passed parameters
* Calling a function
  + Name(argument, argument);
  + Can pass any value as an argument
* Can pass variables as arguments
* Can pass expressions as arguments
* Pass-by-value
  + Each argument is copied into the parameter
* If you don’t pass enough variables, each parameter that doesn’t have a match is undefined
* Ignores any extra arguments
* Return statements
  + Return varName;
  + At function call, set a variable equal to what the function will return
* Variables declared within a function are localized to that function
* Global variables are accessible anywhere
  + Destroyed when page is reloaded
* Local variables typically disappear when function ends
* If you forget to declare a variable before using it, the variable will always be global
* Can make functions anywhere in the file
  + Makes two passes over screen
    - First one read all the function definitions
    - Second one starts executing the code
* Tips for clean code
  + Global variables at the top
  + Keep functions together
  + Define local variables at the top of the function they are used in

Chapter 4: Arrays

* A JS type that can hold many values
  + Var name = [ , , , ];
  + Access item in array
    - Variable name of array followed by index of item
* Zero based
* Each array item has its own index
* Updating array items
  + ArrayName[x] = “New Value”;
* Property Is just avalue associated with an array
  + .length returns length of array
    - will always be one more than the last index
* iterating over an array
  + possible with while loop, more effective with for loop
* can create an empty array
  + var name = [];
  + add items with .push
    - name.push();
* parallel arrays
  + arrays with information at corresponding indexes