9/21/2019
Review questions for lesson 1: Review of JavaScript Functions and Arrays

1. What is a global variable?
2. Why should you avoid globals?
3. What is shadowing?
4. Why should you avoid shadowing?
5. What happens if a function is called and an argument is omitted?
6. What is a default value for a parameter? Give an example and explain how it is used.
7. What happens if a function does not have a return statement?
8. What happens if a function has a return without a value?
9. What happens if there the value to be returned is on a newline after the return keyword?
10. We said that it would be bad if a function getAge showed an alert or printed out age in addition to returning the age. Why is that bad? What design principles does it violate?
11. What is the command/query separation principle?
12. What is the 30 second rule for functions?
13. What does it mean to say functions are first-class objects?
14. What will appear in the console?
    ```
    function sayHi() { alert("Hi");}
    console.log(sayHi);
    console.log(sayHi());
    func1 = sayHi;
    func2 = sayHi();
    console.log(func1);
    console.log(func1());
    console.log(func2);
    myArray = [func1,  func1()];
    console.log(myArray[0]);
    console.log(myArray[0]());
    console.log(myArray[1]);
    console.log(myArray[1]());
    console.log(func2());
    ```

15. What is the rule about where semicolons should appear in JavaScript code?
16. What is a 'callback'? Give an example
17. What is the difference of a function declaration versus expression in JavaScript?
18. What are the 7 JavaScript data types?
19. Why should you always use === instead of ==?
20. Why are pop and push more efficient than shift and unshift?
21. Why should you favor for..of loops instead of for loops with indices?