W2D2 Homework

1. What is the output is of the following JavaScript (without running it)

```
1    x = 1;
2    var a = 5;
3    var b = 10;
4    var c = function(a, b, c) {
5        console.log(x); //1
6        console.log(a); //8
7        var f = function(a, b, c) {
8            b = a;
9            console.log(b); //8
10           b = c;
11           var x = 5;
12       }
13       f(a, b, c);
14       console.log(b); //9
15       var x = 10;
16   }
17   c(8,9,10);
18   console.log(b);  //10
19   console.log(x);  //1
```

2. Define *Global Scope* and *Local Scope* in JavaScript

    Global variables are those declared outside of a block. Local variables are those declared inside of a block.

3. Consider the following JavaScript code:

```
1    // Scope A
2    function xFunc() {
3        // Scope B
4        function yFunc() {
5            // Scope C
6        }
7    }
```

    a. Do statements in Scope A have access to variables defined in Scope B and C? No
    b. Do statements in Scope B have access to variables defined in Scope A? yes
    c. Do statements in Scope B have access to variables defined in Scope C? No
    d. Do statements in Scope C have access to variables defined in Scope A? yes
    e. Do statements in Scope C have access to variables defined in Scope B? yes

4. What is the output is of the following JavaScript (without running it)

```
1   var x = 9;
2   function myFunction() {
3       return x * x;
4   }
5   console.log(myFunction()); 81
6   x = 5;
7   console.log(myFunction()); 25
```

5. What is the output of the following alert (without running it)

```
1   var foo = 1;
2   function bar() {
3       if (!foo) {
4           var foo = 10;
5       }
6       alert(foo);   //1
7   }
8   bar();
```