Unit 2 Review Answers

Lesson 6

1. for, while, and do.
2. A switch is better than if when there needs to be a choice made from several possible options.
3. Any cases in a switch after the default case will never be executed.
4. myVariable = (myInt > 5) ? 50 : 100

Lesson 7

1. The heap is bigger.
2. A memory leak is when memory is allocated from the heap and is not freed.
3. Portability is the quality of being able to compile your code on more than one operating system with as little modification as possible, preferably without any.
4. Typecasting when you tell the compiler to treat one type as another.
5. malloc just allocates memory from the heap. calloc allocates memory and fills it with 0's.
6. The result of `7 & 0` is 0.
7. The result of `7 | 8` is 15.
8. 33 looks like 100001 in binary?
9. The binary number `1000010` is 66 in regular decimal notation?
10. The result of `1 << 5` is 32.

Lesson 8

1. A variable's scope is its lifespan from when it is allocated and declared to when it is freed and how it can be accessed by code.
2. The three types of scope are local, global, and static.
3. The declaration `int * const myPointer;` is a pointer whose value can be changed but whose address cannot be changed.
4. Data written to `stderr` normally is printed to the screen.
5. A handle is an arbitrary number used to uniquely identify an object, such as a file.
6. If you want to write data to the end of an existing file, you must use the "a" or "a+" modes in fopen().

Lesson 9

1. There are ten rows in the array `float myFloatArray[10][20].`