

0. How much memory is a bit? a byte?
1. Know that there are 8 primitive types (4 of which we use), how much memory they use, how many different values they can hold, and for what purposes they are used.
2. How to convert between bases
3. What a compiler, interpreter, assembler, etc do.
4. Variables: Declaring, Assigning, Scope
5. Arithmetic Operations, Compound Operators, and Integer Division
6. Boolean expressions and Demorgan's Law (&&, ||, !)
7. Conditionals: Nested, Chained, Short Circuit
8. Read a switch statement
9. Methods: Writing calling, returning vs printing
10. Loops: Nested, Different Types, etc

Example review Questions

1. 49 in decimal is _____ in binary.
2. 01101101 in binary is _____ in decimal.
3. What are the values of: $5/3$, $5/3.0$, $5\%3$
4. Write code to generate a random number between -5 and 10
5. Write code to read five numbers from the user, multiply them together, and print out the product.
6. What is the opposite of $A \parallel B$?
7. What is the value of $(5 > 6) \&\& (2 < 3) \parallel (1 > 0)$?
8. What is the difference between a syntax error and a logical error?
9. How many times will this loop run? What will the final value of alpha and loopCount be?

```
int loopCount = 1;
int alpha = -2;
while(loopCount <= 5) {
    alpha = alpha + 3;
    loopCount++;
}
```