

## Form II Computer: Review Sheet for Spring Exam

Look over the following list of topics and write down any questions you might have. All of the material you need to know is on the Form II Computer website at <https://grahamtx.net/c2>. The exam will be multiple choice. Questions involving code will be of these types:

1. Reading and understanding some given code, and you must choose the answer that best describes what the code does.
2. A description of something that needs to be done, and you must choose the code that best does that. The choices might include code that has errors, which would be incorrect answers.

### Boolean Logic

1. Boolean values and variables
2. Logical operators **and**, **or**, and **not**
3. Truth tables for the logical operators

### Python Lists

Know how to read and write code to do the following things:

1. Creating lists with strings and numbers
2. Accessing list elements using an index
3. Changing list elements using an index
4. Appending an element to the end of a list
5. Inserting an element at a position in a list
6. Removing an element according to its value
7. Removing an element according to its index
8. Getting the length of a list
9. Sorting a list
10. Reversing the order of elements in a list
11. Looping through the elements of a list using **for**

### Micro:bit

Know how to read and write code to do the following things:

1. Scrolling text on the LED matrix
2. Show a built-in image (You do not have to learn all of the built-in images.)
3. Make an image slide show
4. Make a custom image
5. Read and respond to a button press
6. Detect and respond to tilt
7. Detect and respond to gestures

## Functions

Know how to read and write code to do the following things:

1. Define a function in general
2. Define a function to draw a triangle, square, or polygon
3. Define a function to return a value
4. Use a function that returns a value
5. Define a function that calculates the population of bacteria given the number of generations.

## Twine Chapbook

Know how to code the following things:

1. Simple links
2. Forks
3. Setting variable values in the *vars* section
4. Center text
5. Conditional display
6. Time delay
7. Printing variable values
8. Text input