**CS108L Computer Science for All**

**Module 7: Computer Science Concepts**

**Algorithm:** A set of instructions that can be used repeatedly to solve a problem or complete a task.

**Counted Loops:** Set of commands that are repeated a fixed number of times

**Conditional Loops:** Set of commands that are repeated while a certain conditional statement is true.

**Agentsets**: Set of agents (turtles (or breeds), patches or links)

**List**: An ORDERED collection of values. A list is not necessarily sorted. Order is important ({1,2,3} does not equal {3,2,1}) and items CAN be repeated.

**Sets (Agentsets)**: An UNORDERED collection of values . Order is NOT significant ({1,2,3 DOES equal {3,2,1}) AND items CANNOT be repeated

**Sorting**: Arranging a group of things (set) according to some criteria (size, value, color, …)

**Big O Notation:** Used in computer science when analyzing algorithms. A measure of how an algorithm runs as you increase the input size dramatically. Incorporates changes in processing time and memory used. Also, another way to classify algorithms.