

# CS108L Computer Science for All

## Week 5: Computer Science Concepts

**Boolean:** something that evaluates to one of two possible values.

**Boolean Expression:** A mathematical expression that evaluates to one of two values.

**Boolean Logic** (Boolean Math or Boolean Algebra): The math of manipulating Booleans. And Boolean expressions

**Boolean Operators:** Used in Boolean Logic to compare and manipulate Booleans and Boolean expressions. Examples are AND, OR, NOT

**Command block** – a sequence of commands enclosed in square brackets

**Control (of) Flow** – refers to the order in which statements or commands are executed and expressions are evaluated in the program

- Simple programs = linear sequence
- More advanced programs = nonlinear sequence and looping – conditional statements are used to control the flow

**Conditional Statement-** one that depends on the outcome of a Boolean expression

**if-then Statement-** If condition is true then perform statements

If **condition** then

**statements**

- Condition: a boolean (true/false) expression
- Statements: operations to perform if condition is true

**if-else Statement -** If condition is true then perform statements1, if the condition is false then perform statements2.

If **condition** then

**Statements1**

Else

**Statements2**

- Condition : a boolean (true/false) expression
- Statements: operations to perform if condition is true

**Patches** – a type of agent in NetLogo, represent the environment