## Sticky Knowledge:

- ✓ I know that a sequence is a list of instructions in a particular order.
- ✓ I know that if I change the sequence I may change the outcome of the program.
- ✓ I can solve problems by decomposing them into smaller parts.
- ✓ I can detect and debug errors in my sequence.
- ✓ I can use and edit a pre-written program to achieve a specific outcome.
- ✓ I can use logical reasoning to explain what will happen next.
- ✓ I can predict how a change in a sequence may impact on the outcome of a program.

Sequencing

Sequencing is the specific order in which instructions are performed in an algorithm. Changing the sequence can change the outcome and cause bugs within the program.
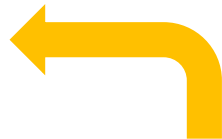
This program will create a square using the pen tool in Scratch. If I was to change the sequence of these events, it might not make a square anymore!

Big Idea:

I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output. I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Input vs Output

An input is information that is put into a computer, such as text typed in through the keyboard.

An output is information that comes out of a computer, such as sound from the speakers or text or images displayed on the screen.

Vocabulary

Computer Science:
Using computers to solve problems.

Computational Thinking:
Learning to solve problems, with or without a computer.

Sequence:
The specific order in which instructions are performed in an algorithm or program.

Input:
Information that is put into a computer.

Output:
Information that comes out of a computer.