Last lesson we designed an algorithm (a set of instructions) to make a sprite do calculations.

What's your first number?
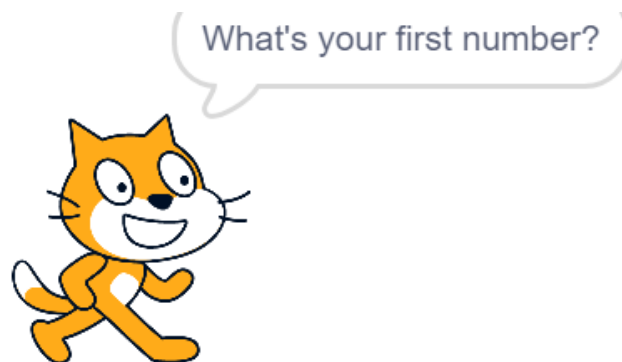
What do you remember about the algorithm?

```
when this sprite clicked
ask  What's your first number?  and wait
set  first_number ▼  to  answer
ask  What's your second number?  and wait
set  second_number ▼  to  answer
set  result ▼  to  first_number  +  second_number
say  And the answer is  for  2  seconds
wait  1  seconds
say  result
stop  this script ▼
```
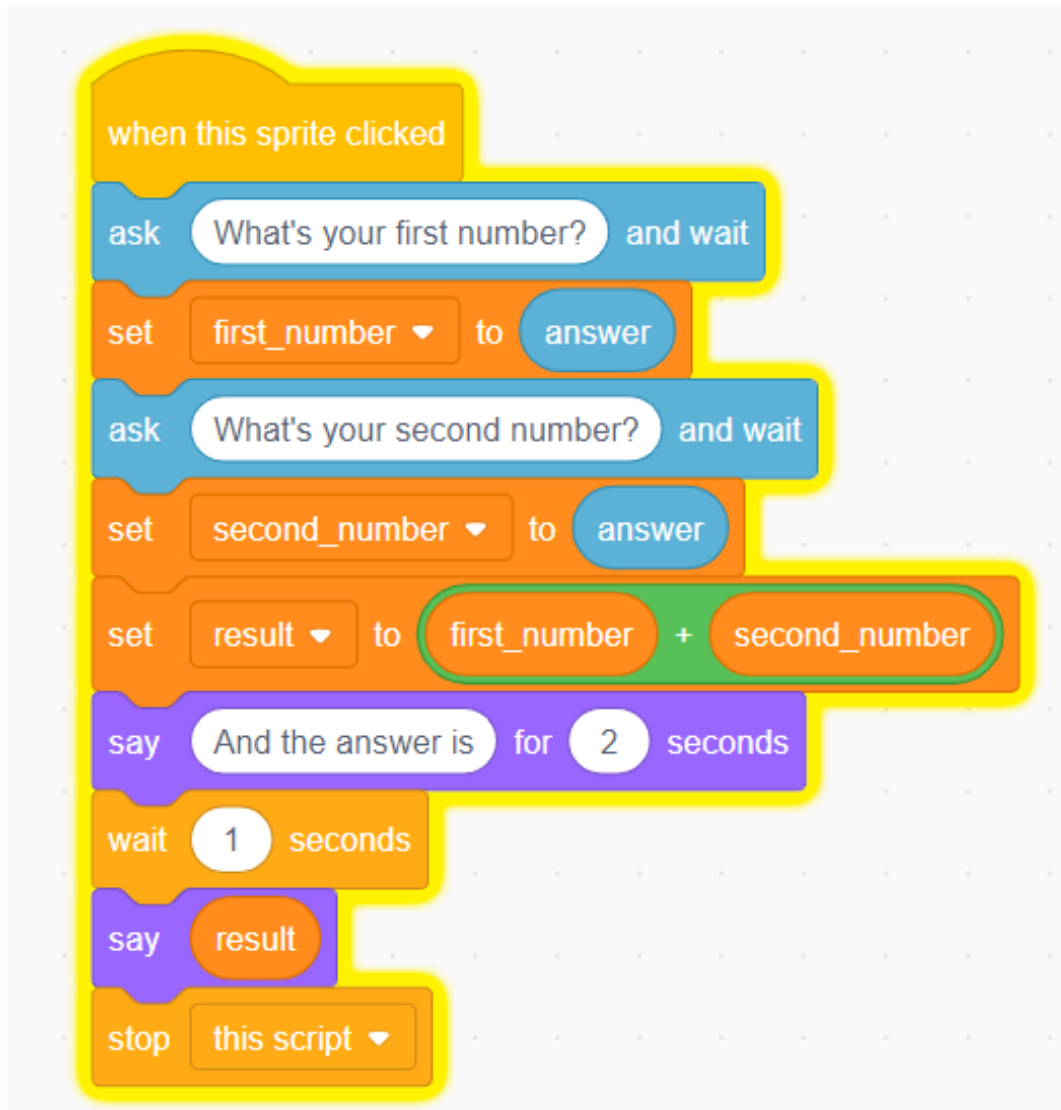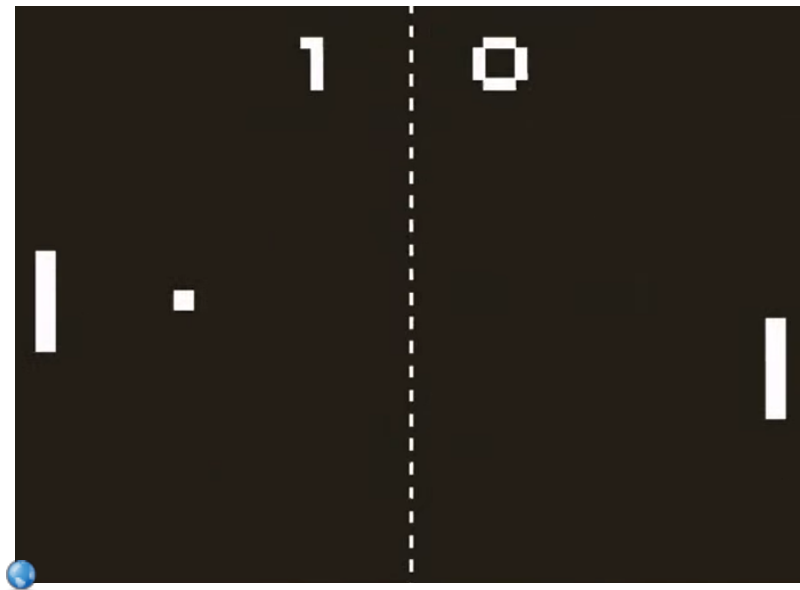
LO: To use a variable to increase programming possibilities

- Create a Pong game

What is an algorithm?

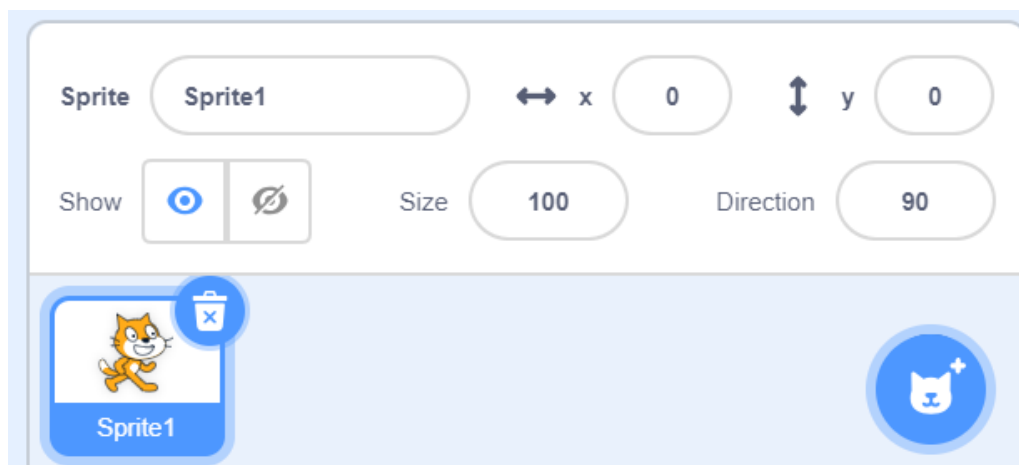What have you created using an algorithm in programming this and previous years?

Today you will be making a game like ping pong with Scratch.

What instructions might you need?

How many sprites might you need?

First you need to select two different sprites and put them on the left and right of the screen so they are facing each other and are a similar size.

Now you need to make the sprites move in the same way as the ping pong game.
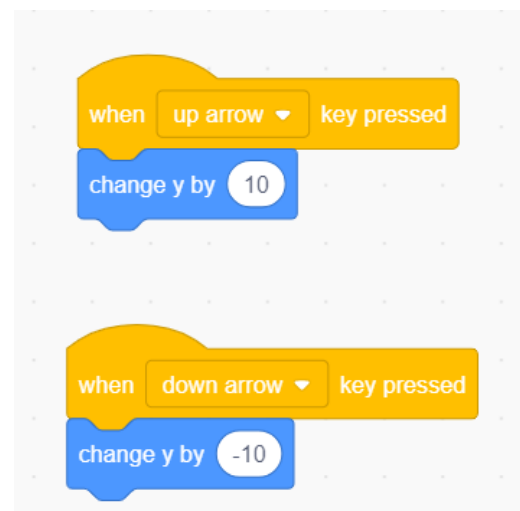
How might you move the sprites?

We use event and motion tabs.
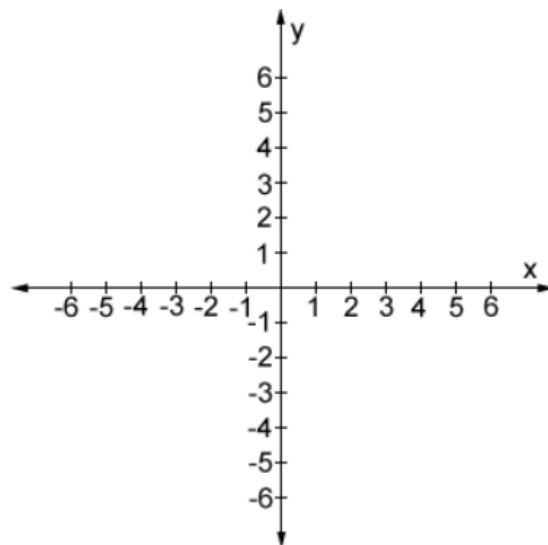
Like in Maths, we have an x and y axis.

In order to move our sprite up and down, we need to change the y axis.

You can choose the keys for movement and the amount it moves.

Why do we use a positive and negative number?

What could we use if we wanted our sprites to move sideways?

What will I give these instructions to if I want each sprite to move independently?
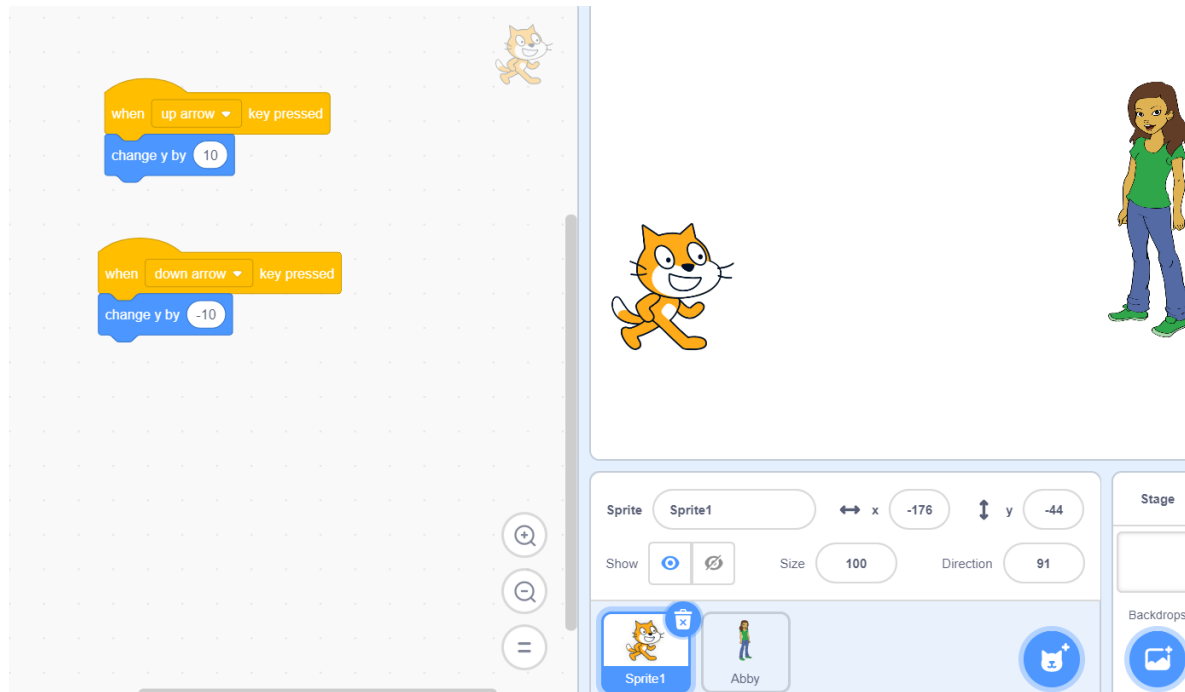
Remember programming is giving instructions to each independent sprite.

How can we do the other sprite?

What will happen if we use the same keys for both sprites?

You will need to choose 4 different keys in total (2 for moving the left sprite and 2 for moving the right sprite).

Time to save your work!

What have you learnt today?