

Progression in Computing

Coding

date

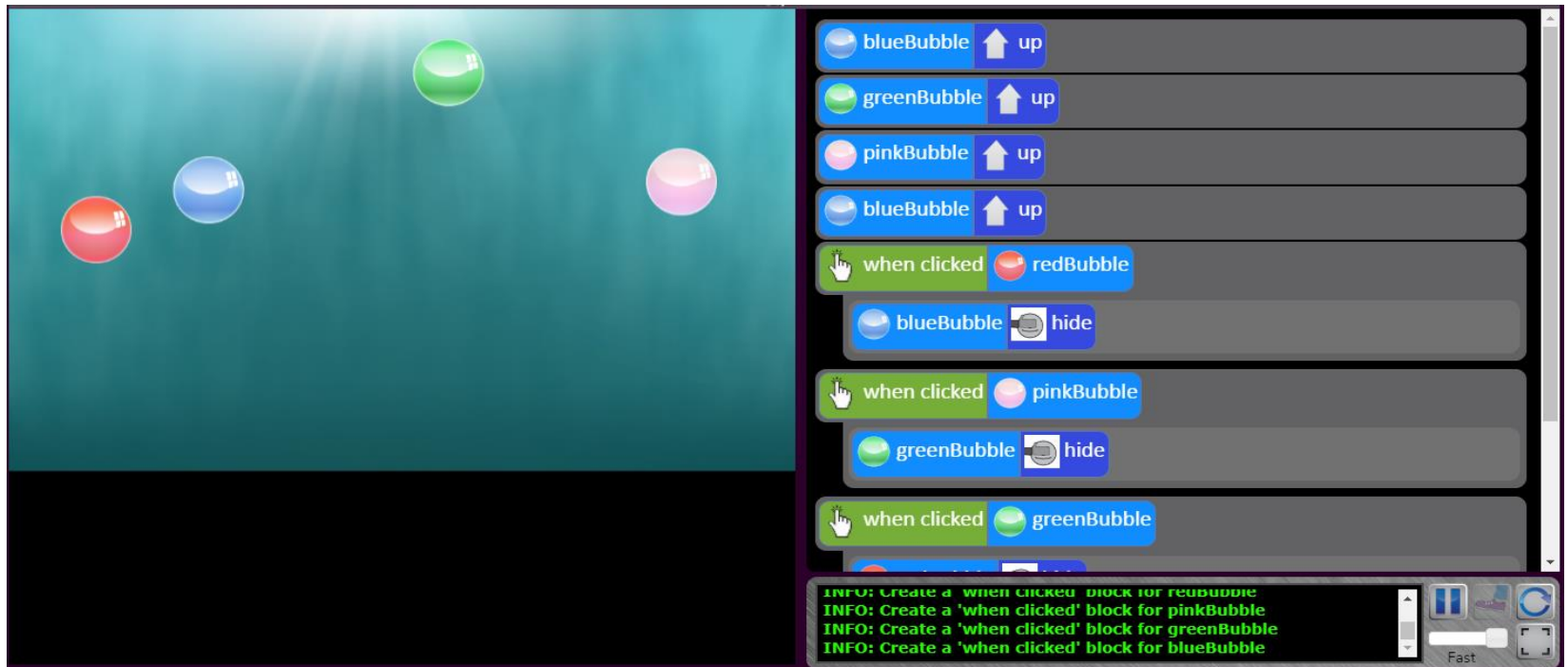


EYFS



I can complete a simple computer programme.

Year 1



The image shows a Scratch project window. On the left is a stage with a blue-green background and a black floor. Five bubbles are visible: a red one on the left, a blue one in the middle, a green one at the top, and two pink ones on the right. On the right is the code editor with the following blocks:

- blueBubble ↑ up
- greenBubble ↑ up
- pinkBubble ↑ up
- blueBubble ↑ up
- when clicked redBubble
- blueBubble hide
- when clicked pinkBubble
- greenBubble hide
- when clicked greenBubble

At the bottom of the code editor, there are four green info messages:

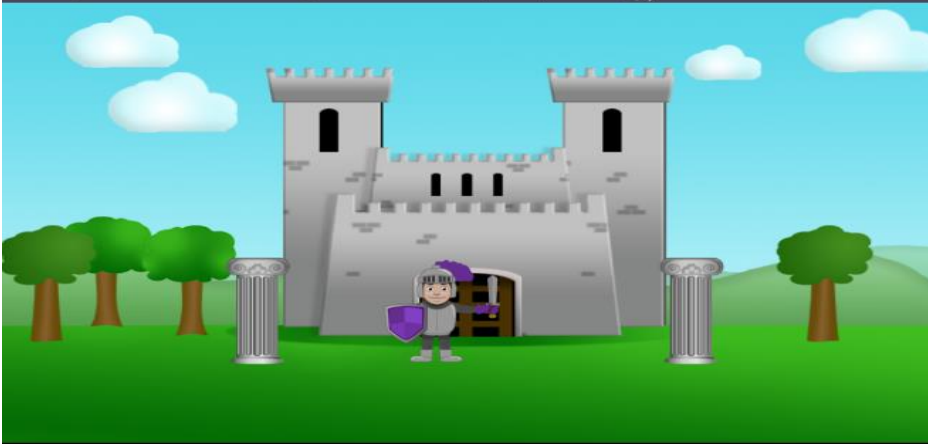
```
INFO: Create a 'when clicked' block for redBubble  
INFO: Create a 'when clicked' block for pinkBubble  
INFO: Create a 'when clicked' block for greenBubble  
INFO: Create a 'when clicked' block for blueBubble
```

Standard Scratch interface elements like a scroll bar, a 'Fast' speed slider, and a 'Fast' label are also visible.

I can write a program that controls how an object will move.

Year 2

Challenge: The instructions to the knight have been mixed up. Can you fix it? 🗣️

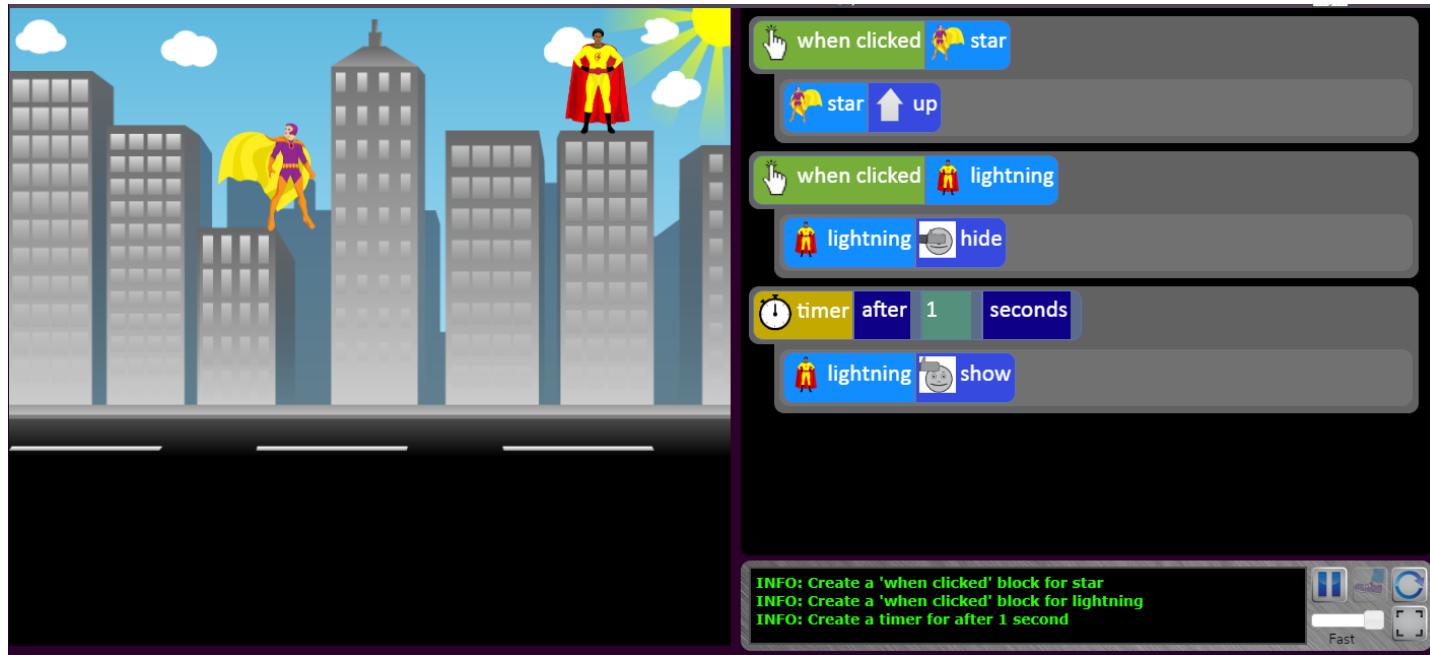


```
knight ➡ right  
when knight collides with rightPillar  
knight ← left  
when knight collides with leftPillar  
knight ➡ right
```

INFO: move knight right
INFO: Move knight left
INFO: Move knight right
INFO: Move knight left

I can identify and correct some errors in an algorithm.

Year 3



The image displays a Scratch programming environment. On the left is a stage with a cityscape background. Two superhero characters are visible: one with a yellow cape on a building and another with a red cape on a taller building. On the right is the script editor, which contains the following code blocks:

- when clicked → star
- star → up
- when clicked → lightning
- lightning → hide
- timer → after 1 seconds
- lightning → show


At the bottom of the script editor, there are three informational messages:

- INFO: Create a 'when clicked' block for star
- INFO: Create a 'when clicked' block for lightning
- INFO: Create a timer for after 1 second

Control buttons for play, stop, and refresh are visible at the bottom right of the script editor.

I can design and code a program that follows a simple sequence.

Year 4

Activity: Use design mode to add more fish. Try adding click events so the fish don't start moving until you click them. 




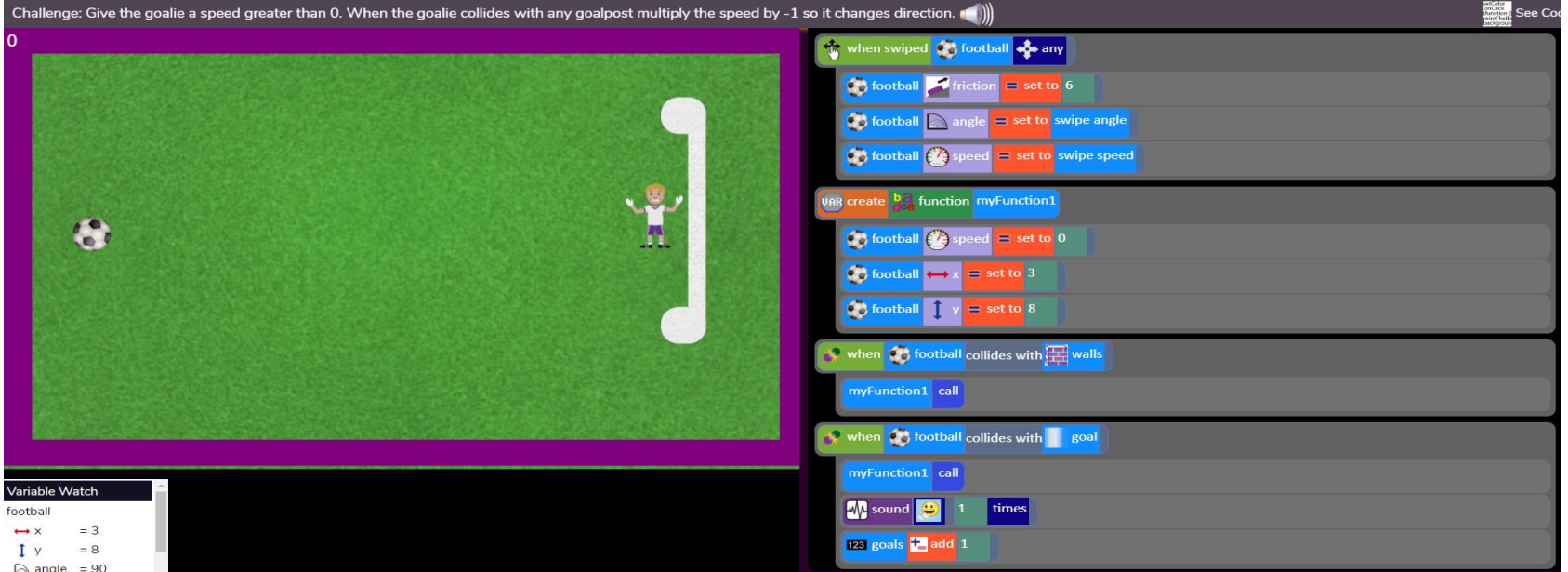
The screenshot shows a Scratch-like programming environment. On the left is a stage with an underwater scene containing various fish: three tuna, a group of clownfish, and several trout. On the right is a script editor with three event-driven scripts:

- Script 1:** "when clicked" (hand icon) → "Clown" (clownfish icon) → "up" (up arrow icon)
- Script 2:** "when clicked" (hand icon) → "Tuna" (tuna icon) → "left" (left arrow icon)
- Script 3:** "when clicked" (hand icon) → "Trout" (trout icon) → "down" (down arrow icon)

I can use software to create individual Algorithms that allow each characters to perform a different task.

Year 5

Challenge: Give the goalie a speed greater than 0. When the goalie collides with any goalpost multiply the speed by -1 so it changes direction.  See Code



0

Variable Watch

football		
x	=	3
y	=	8
angle	=	90

```
when swiped football any
  friction set to 6
  angle set to swipe angle
  speed set to swipe speed

create block function myFunction1
  speed set to 0
  x set to 3
  y set to 8

when football collides with walls
  myFunction1 call

when football collides with goal
  myFunction1 call
  sound 1 times
  123 goals add 1
```

I can use software to create complex Algorithms to control a football and goalkeeper in the correct sequence.

Year 6

Challenge: Make your own computer program using 2code

ONCE UPON A LAND LONG AWAY{ISH}
WAS A QUIET TOWN
UNTILLLLLLL
MICIAL ROSEN BURNT IT DOWN



```
when key w
  print print to screen 'ONCE UPON A LAND LONG AWAY{ISH}'

when key q
  background image set to [img]

when key e
  print print to screen 'WAS A QUIET TOWN'

when key r
  print print to screen 'UNTILLLLLLL'

when key t
  background image set to [img]

when key y
  print print to screen 'MICIAL ROSEN BURNT IT DOWN'
```

I can use software to create multiple Algorithms that change the background and add text.