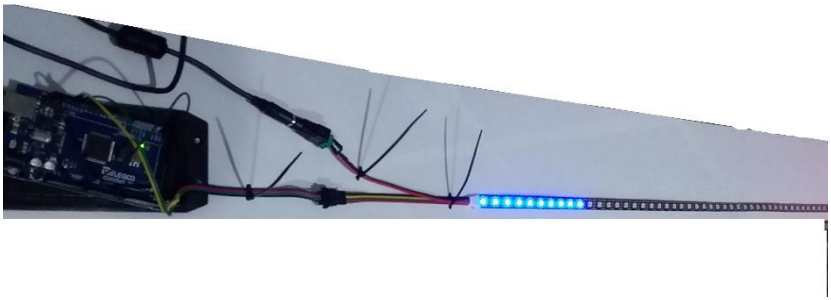
Teddywaddy Code Club

Activity 3d

Collision



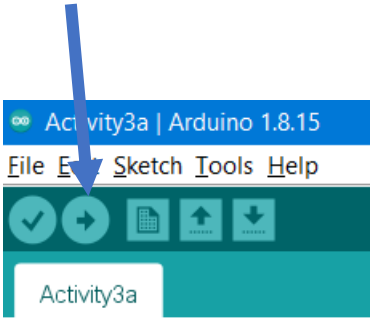
Collision

Open the activity3d.ino code using the Arduino program. In this code, two sets of lights collide.

Part of the code is shown on the next page. You will be making some changes.

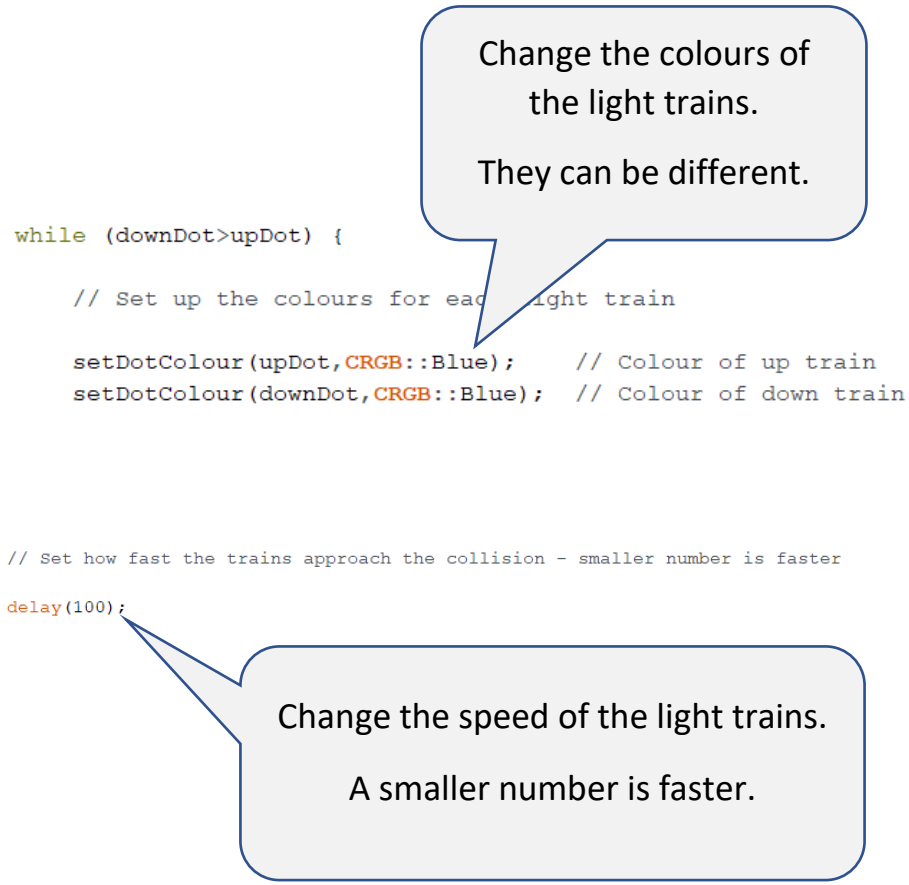
Take care to make sure you find the correct piece of code to change.

After you make some changes, press the right arrow button.



The two trains

Take care to make sure you find the correct piece of code to change.



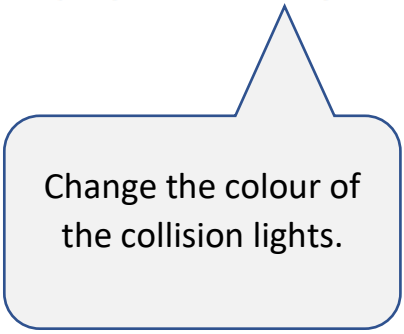
Collision type

The collision can be one of three types.

The code for the first collision type is shown below.

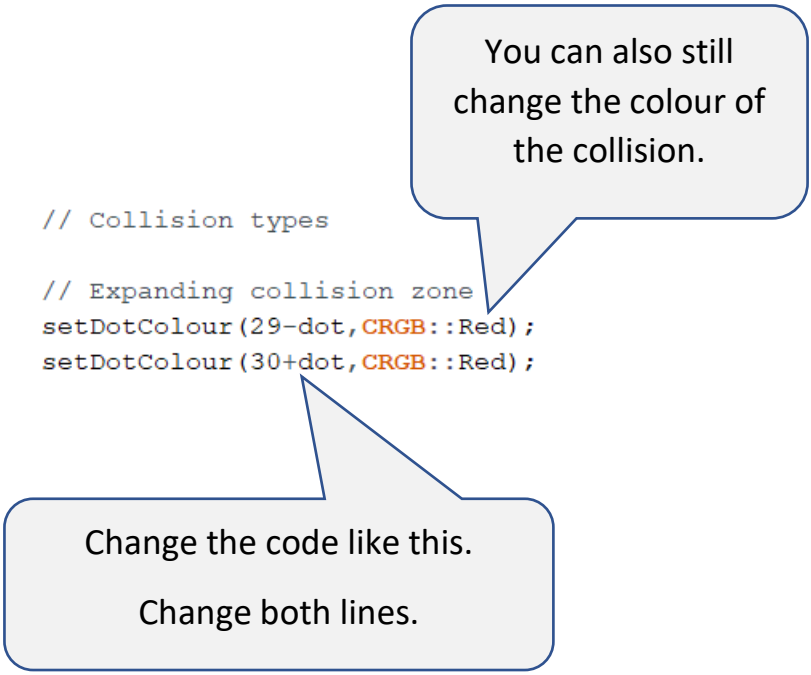
```
// Collision types

// Two light collision zone
setDotColour(29,CRGB::Red);
setDotColour(30,CRGB::Red);
```



Expanding collision

For a different type of collision, you can change the code as follows.



Flashing collision

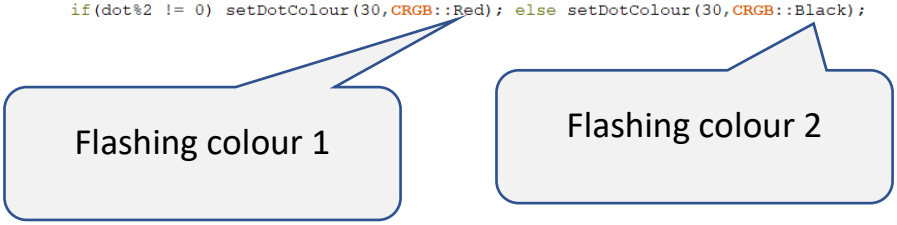
To make the lights flash where the collision happens is a bit complicated.

You need to type in two very long lines of code.

Make sure you replace the existing two lines.

```
// Collision types

// Flashing collision zone
if(dot%2 != 0) setDotColour(29,CRGB::Red); else setDotColour(29,CRGB::Black);
if(dot%2 != 0) setDotColour(30,CRGB::Red); else setDotColour(30,CRGB::Black);
```



You can also change how fast the collision happens.

Make sure you find the correct piece of code.

```
// Set how fast the collision happens - smaller number is faster

delay(100);
```