

Lights and Music!

For this project you will need some battery operated* fairy lights that you don't mind experimenting with! *They must be battery operated - NOT MAINS ELECTRICITY!

Choose fairy lights that only use 2 AA or 2 AAA batteries.
(Maximum 3V).

Here is the code:



```
function play note note length
  digital write pin P1 to 1
  play tone note for length until done
  digital write pin P1 to 0
  rest for 1/8 beat
```

Click on 'Function' button and 'Make a Function'.

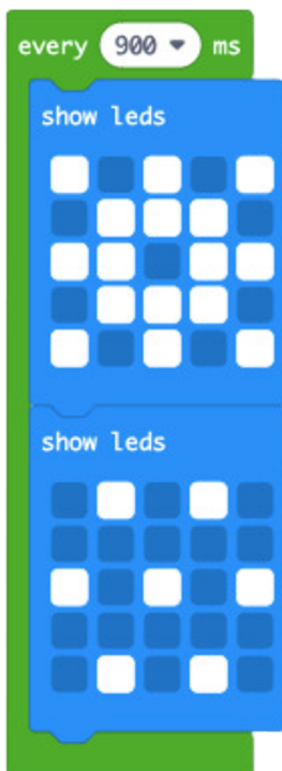


Then, click on 'Number' twice so that 2 x Number parameters appear in the function box.



```
function play_note note length
```

Type 'note' and 'length' in the parameter values.



Make an animation using your micro:bit's LEDs.

You may also like to code a STOP button.

```
on start
  digital write pin P1 to 1
  set built-in speaker ON
```

Use this code to use the micro:bit's own speaker.

Lights and Music!

```
on button A pressed
  set volume 255
  digital write pin P1 to 0
  call play note 494 200
  call play note 494 200
  call play note 494 400
  pause (ms) 75
  call play note 494 200
  call play note 494 200
  call play note 494 400
  pause (ms) 150
  call play note 494 200
  call play note 587 200
  call play note 392 400
  call play note 440 100
  call play note 494 400
  pause (ms) 100
  call play note 523 200
  call play note 523 200
  call play note 523 200
  call play note 523 200
  call play note 523 200
  call play note 494 200
  call play note 494 200
```

```
call play note 494 200
call play note 440 200
call play note 440 200
call play note 494 200
call play note 440 400
pause (ms) 50
call play note 587 400
pause (ms) 200
call play note 494 200
call play note 494 200
call play note 494 400
pause (ms) 75
call play note 494 200
call play note 494 200
call play note 494 400
pause (ms) 150
call play note 494 200
call play note 587 200
call play note 392 400
call play note 440 100
call play note 494 400
pause (ms) 100
call play note 523 200
call play note 523 200
```

```
call play note 523 200
call play note 523 200
call play note 523 200
call play note 494 200
call play note 494 200
call play note 494 200
call play note 587 200
call play note 587 200
call play note 523 200
call play note 440 300
call play note 392 400
pause (ms) 1000
digital write pin P1 to 1
```

This code plays 'Jingle Bells'. Can you code a different festive melody for your micro:bit?

