

# Flowol Challenges

## Challenge 1:

Design the algorithm so that it keeps going forever

This will need to use **repetition**

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## Challenge 2:

Create a more complex flash pattern. Let's do three flashes every 15 seconds

Use **2 second flashes** with a **1 second delay** between each flash and a longer delay at the end to bring the time up to 15 seconds in total

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## Challenge 3:

Only turn the light on at night (when the sun isn't out)

This needs to use **selection**

The selection block needs to check whether the sun is on (out). You can click on the sun to change whether it's on or off

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## Challenge 4:

Change the flash pattern to two long flashes followed by three short flashes and then a 7 second gap

A long flash is 3 seconds, a short flash is 1 second

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## Challenge 5:

Use a **variable** to code this challenge - there is a sheet to help you

Create a flash pattern of three flashes long flashes (3 seconds each) followed by a 10 second delay

You **must** use a variable for this challenge

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## Challenge 6:

Use **subroutines** for this challenge

Code a flash pattern of two long flashes followed by three short flashes and then a 5 second gap

A long flash is 3 seconds, a short flash is 1 second

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## Challenge 7:

Use **subroutines** for this challenge

Now you can create a long flash and a short flash, you can code the lighthouse to send

**Morse code**

There are a set of slides on Morse code to help you discover what it is...