Flowol Challenges
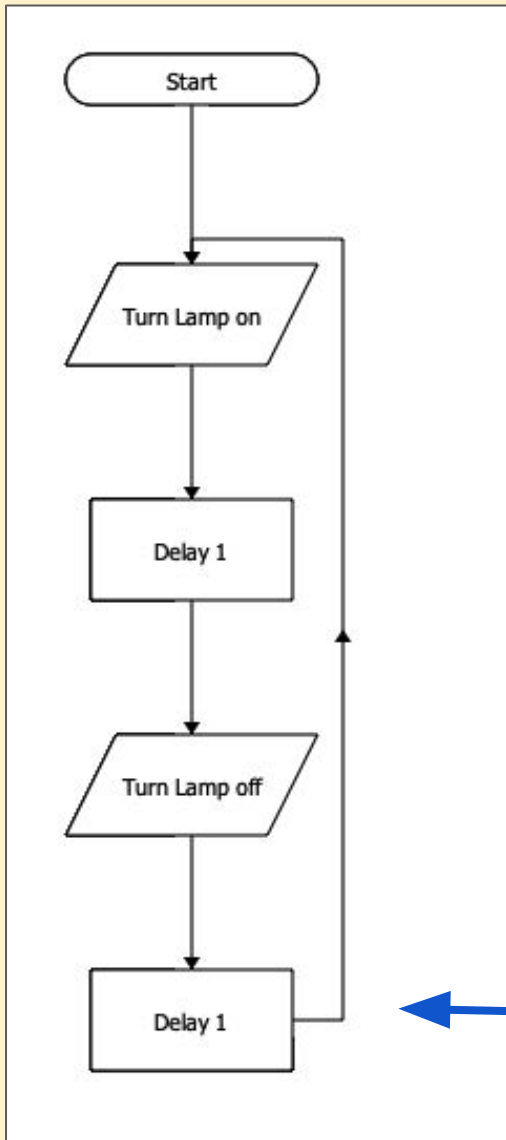
Challenge 1:

Design the algorithm so that it keeps going forever

This will need to use **repetition**

Flowol Challenges - 1

Start

Turn Lamp on

Delay 1

Turn Lamp off

Delay 1

A second DELAY box is needed to make sure the light flashes properly
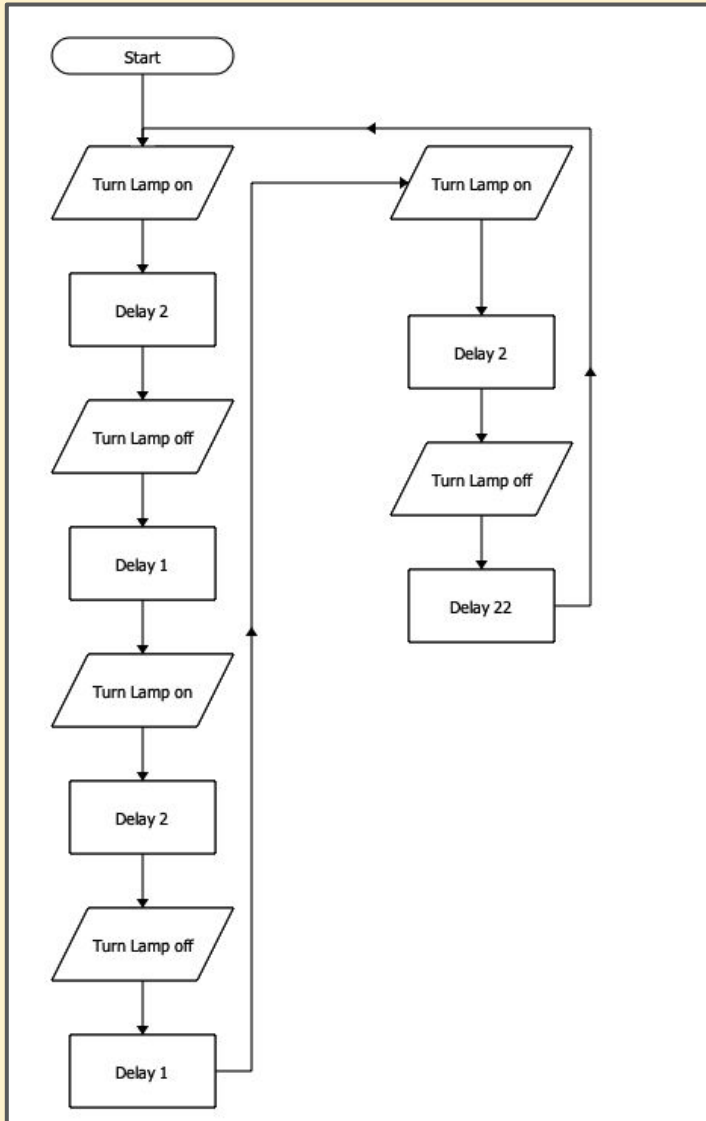
Flowol Challenges

Challenge 2:

Create a more complex flash pattern - Happisburgh uses 3 flashes every 30 seconds

Use **2 second flashes** with a **1 second delay** between each flash and a longer delay at the end

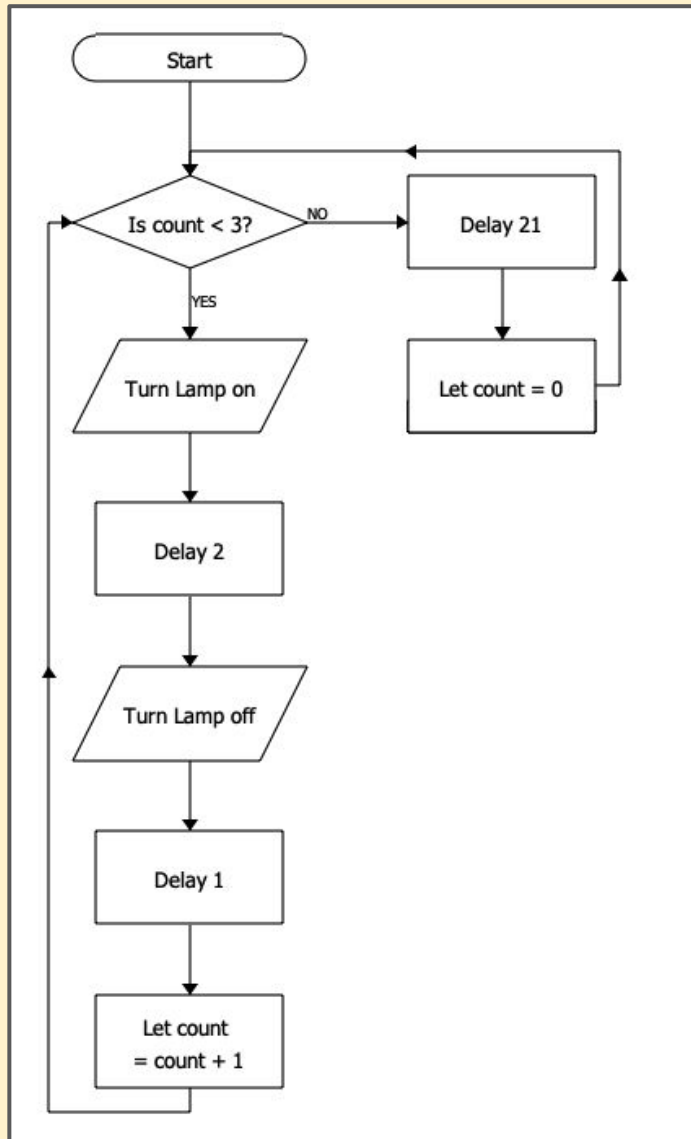**Time** your pattern to check it's 30 seconds…

Flowol Challenges - 2

Challenge 4 will give you a better way to do this using SUBROUTINES

There's also an alternative solution using a VARIABLE

Flowol Challenges - 2

An alternative way to solve this using a **variable** to count the number of times the lamp is flashed

It's not much shorter, but it is a lot more efficient
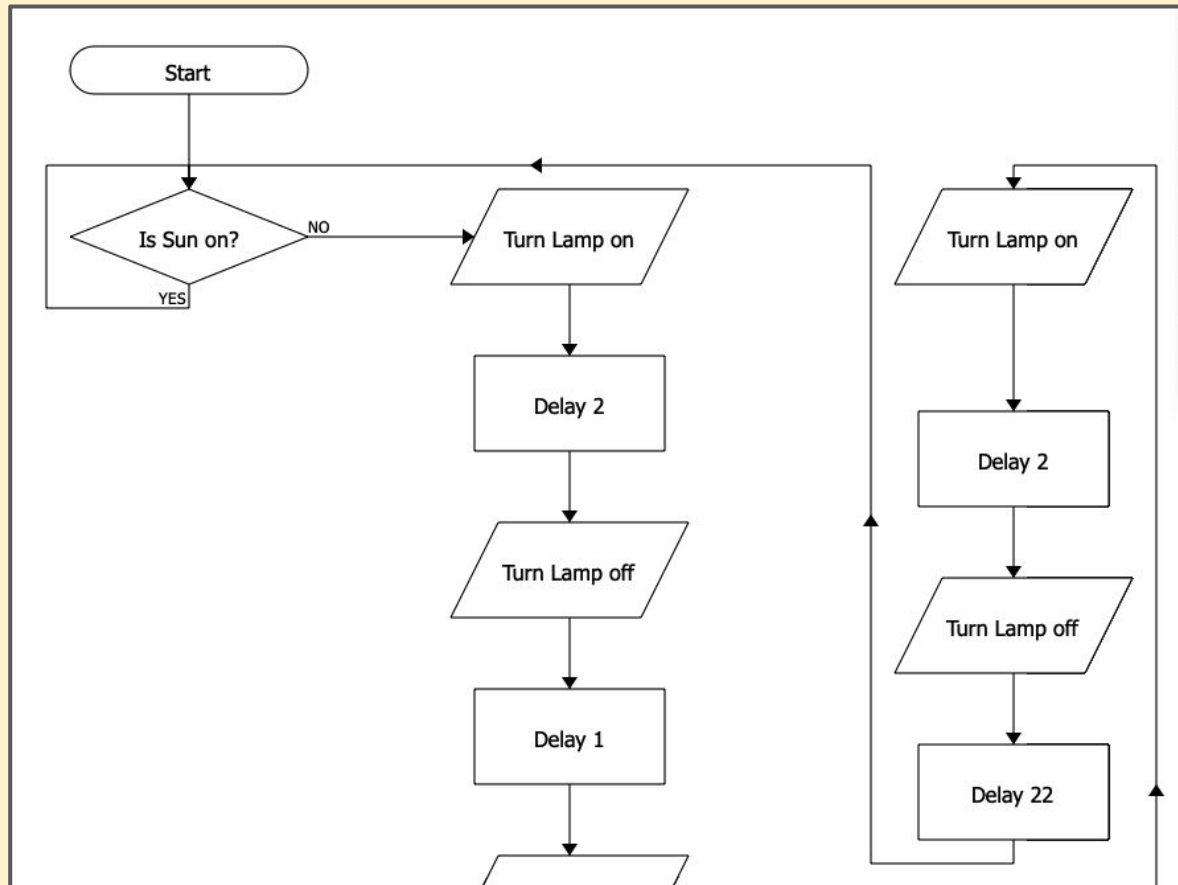
Flowol Challenges

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

Flowol Challenges - 3

Click the sun to make it light up. Make sure you have the YES and NO right here!

Make sure that the final DELAY goes back to BEFORE the Selection symbol (diamond)
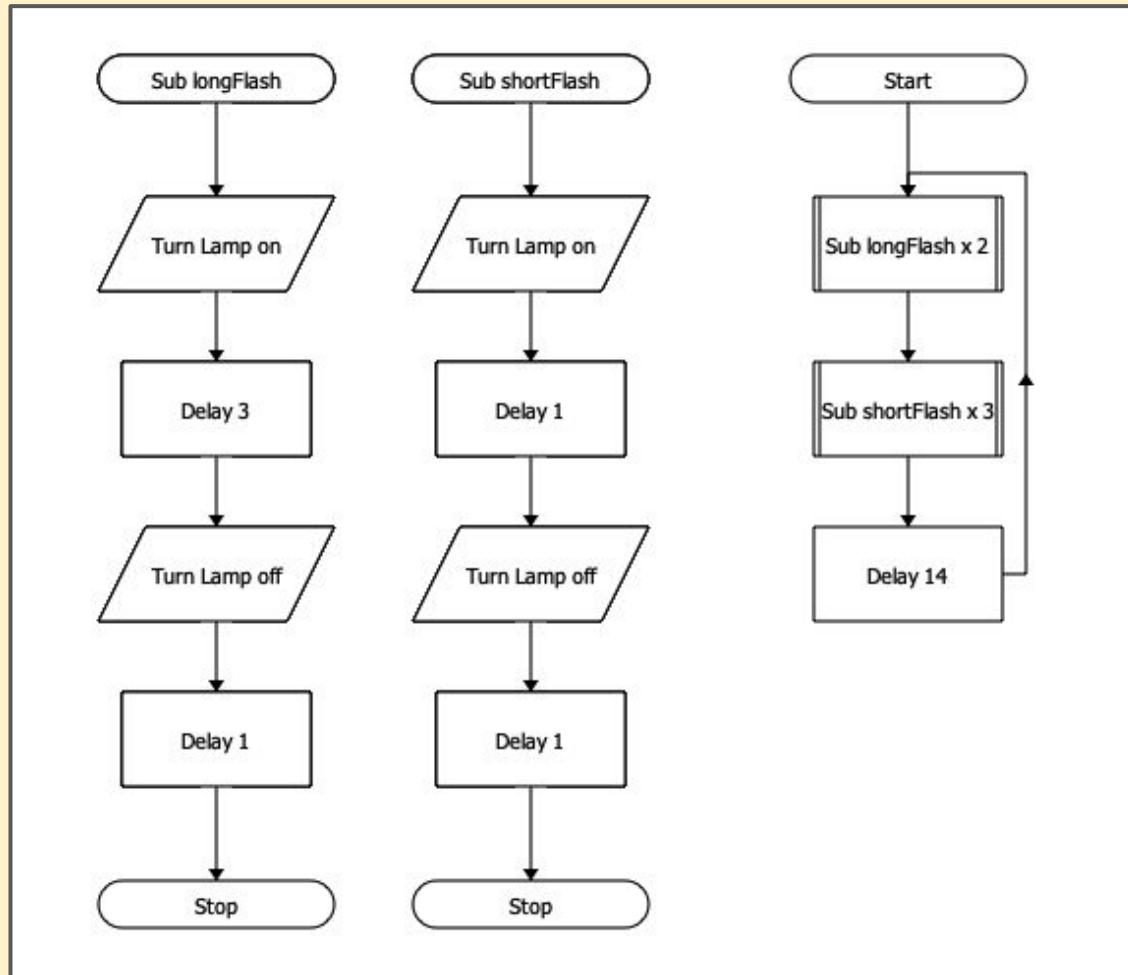
Flowol Challenges

Challenge 4:

Change the flash pattern to two long flashes followed by three short flashes and then a 15 second gap

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

Using **subroutines** will help here

Flowol Challenges - 4

Using SUBROUTINES is a good way to reduce the length of the algorithm