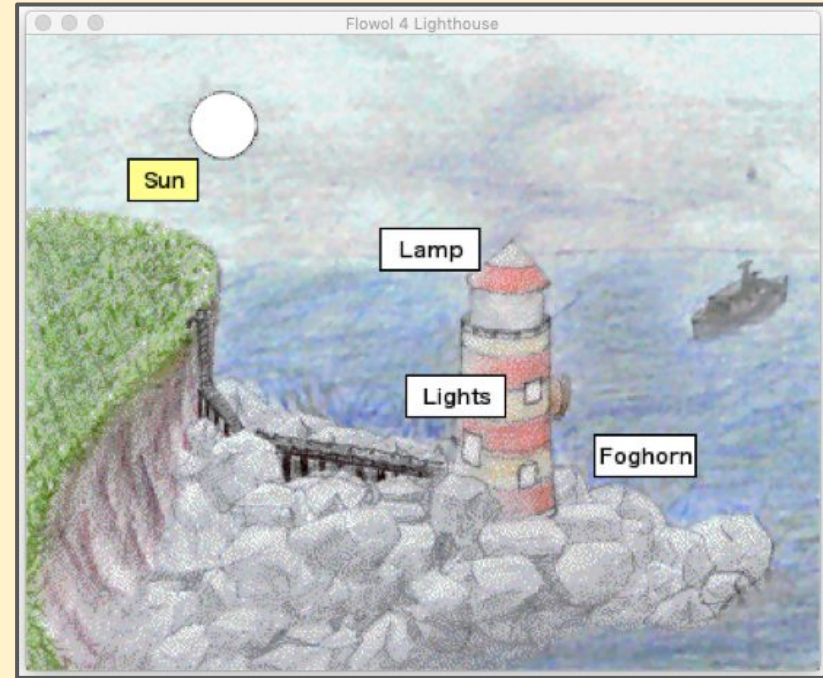


Algorithms with Flowol 4

Flowol lets you experiment with algorithms without having to write computer code

Using the **Lighthouse Mimic** means we can program a flash pattern

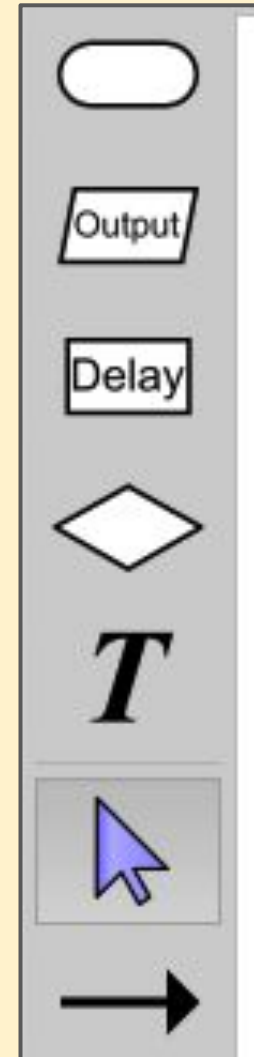


Algorithms with Flowol 4

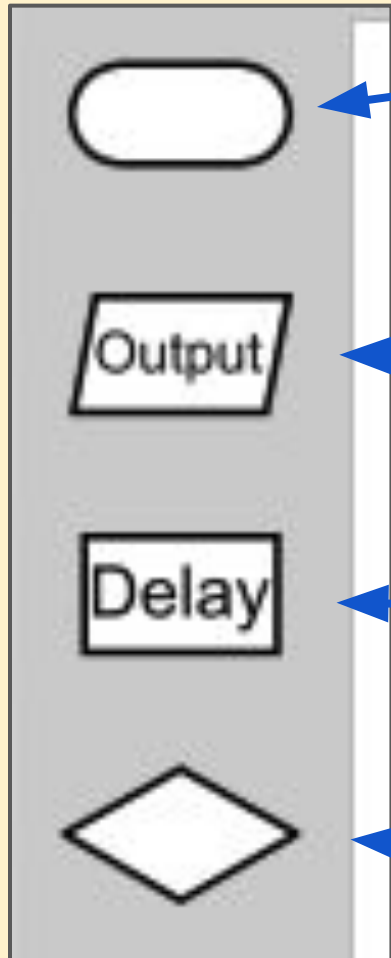
Flowol uses **flowchart symbols**

These are often used by
computer programmers to help
plan their code

Each symbol has a meaning



Algorithms with Flowol 4



START or **STOP** - every Flowol algorithm must start with a START. Most of them end with a STOP

INPUT or **OUTPUT** - turns INPUTS OR OUTPUTS on or off

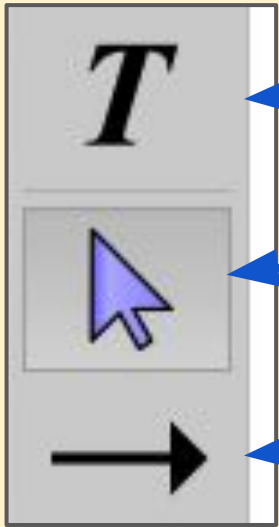
DELAY - used to set a delay so that an output lasts longer

DECISION - can be used to decide which way to go

Algorithms with Flowol 4



DELETE a symbol - click on the symbol and then press the X on the **top menu**



TEXT LABEL - adds a label to the algorithm

MOVE - use to drag a box

ARROW - add a flow arrow to the flowchart. Click the arrow, click the first box and then click the box to go to

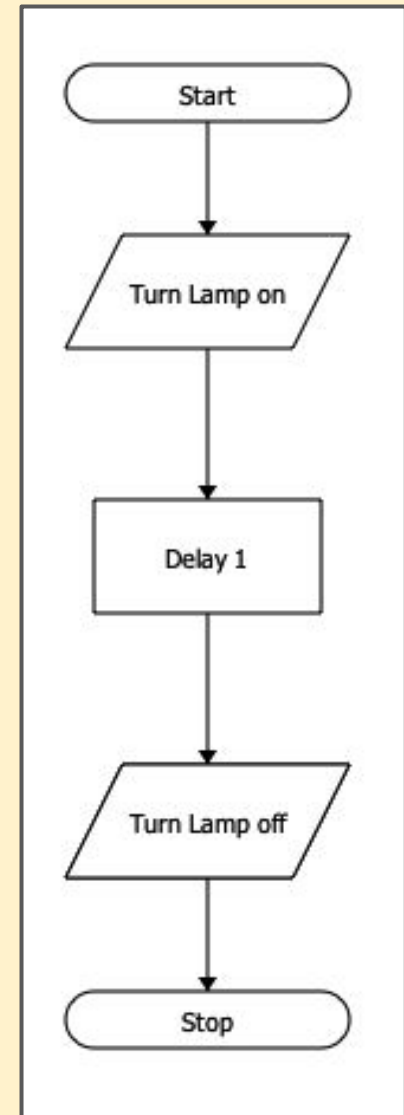


RUN/STOP - run the algorithm (at the **bottom** of the screen)

Algorithms with Flowol 4

A simple algorithm for a very basic flash pattern would look like this

Use **Flowol 4** to create the flash pattern and run it



Algorithms with Flowol 4

Algorithm challenges:

1. **Easy:** create a more complex flash pattern -
Happisburgh lighthouse uses 3 flashes
every 30 seconds
2. **Tricky:** design the algorithm so that it
keeps going forever
3. **Hard:** only turn the light on at night (when
the sun isn't out)