

Micro:bits - key ideas

There are four key programming ideas:

1. algorithms
2. sequence
3. selection
4. repetition

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An **algorithm** is a set of instructions to complete a task

We use algorithms to **plan** instructions before writing computer code

- it makes is easy to check ideas for how a program might work
- it makes writing computer code quicker and easier
- it helps reduce mistakes in the code

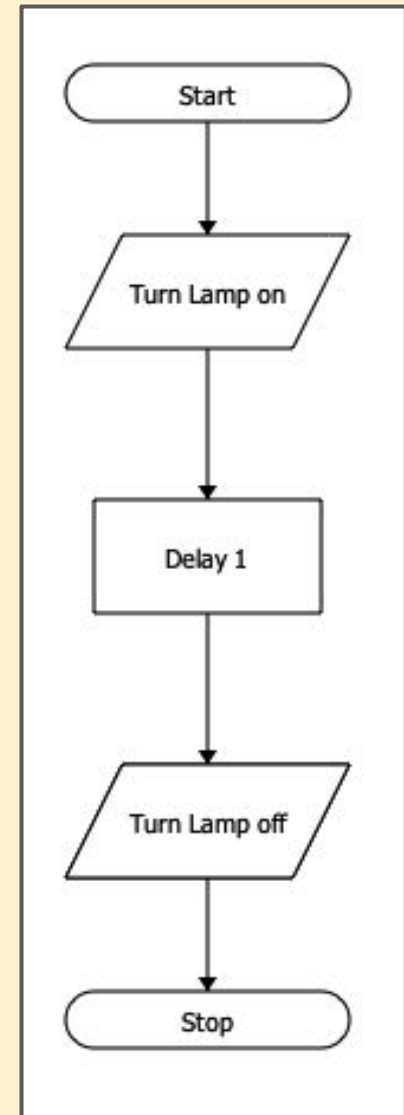
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One way of writing algorithms is to use **flowcharts**

It's important to get instructions in the right order.

This is called **sequence**

Sequence means getting things in the right order

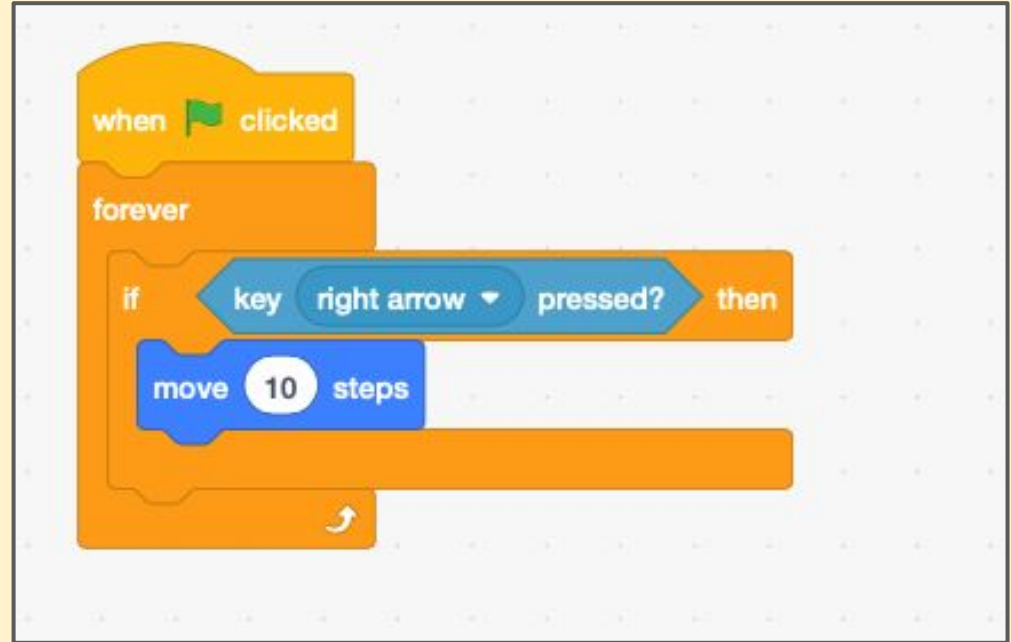


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Sometimes we need to do a section of code more than once

This is called **repetition**

Repetition is repeating something



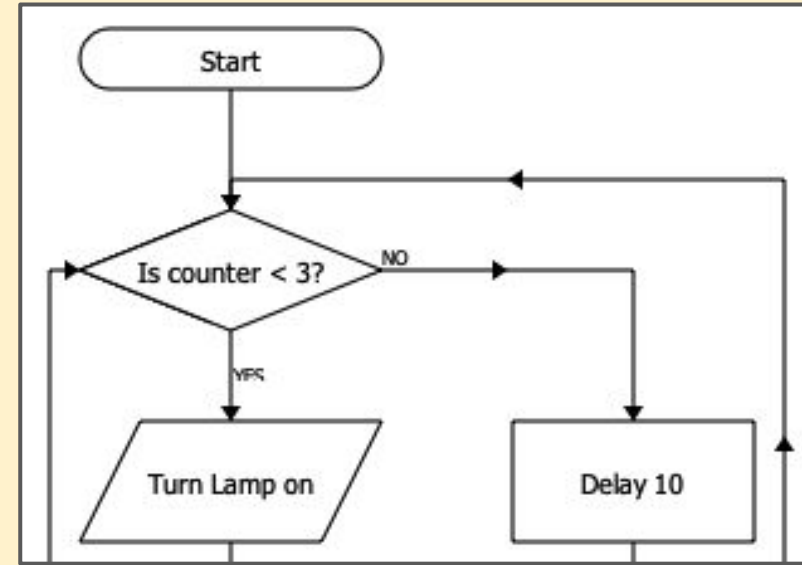
The forever block in this Scratch program keeps doing the section of code until the program stops

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Sometimes we need to choose which section of code to do next

This is called **selection**

Selection is choosing what to do next something in a program



The diamond shaped symbol chooses when to turn the lamp on

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Start a new PowerPoint presentation

Title: **Micro:bit Programming**

On the **first slide** write down the meanings of the four key ideas:

1. algorithm
2. sequence
3. selection
4. repetition

Save your PowerPoint in your OneDrive and then share it with me

Use the learning framework from today's lesson to help!