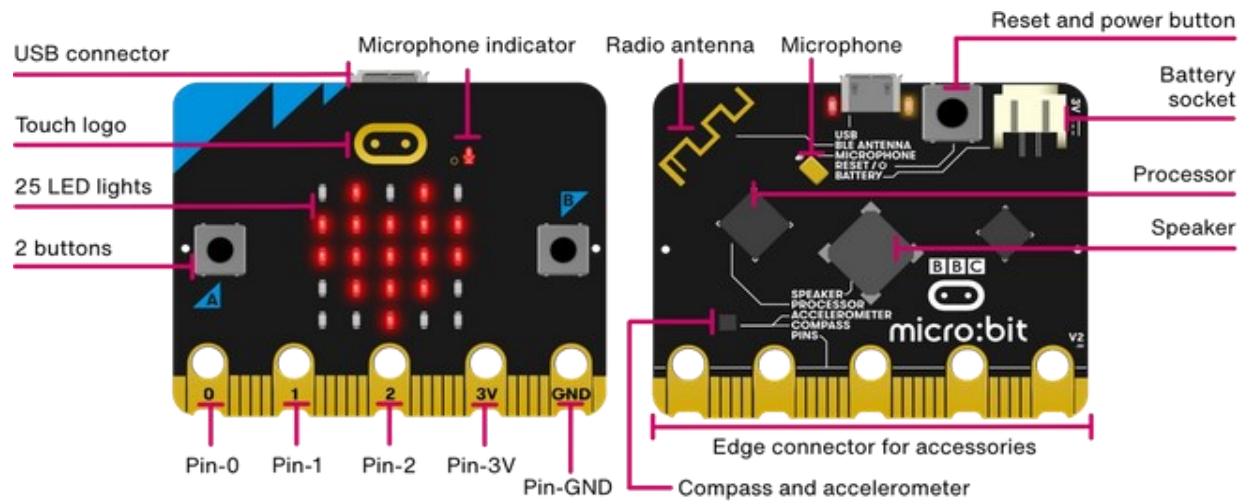


Introducing the Microbit

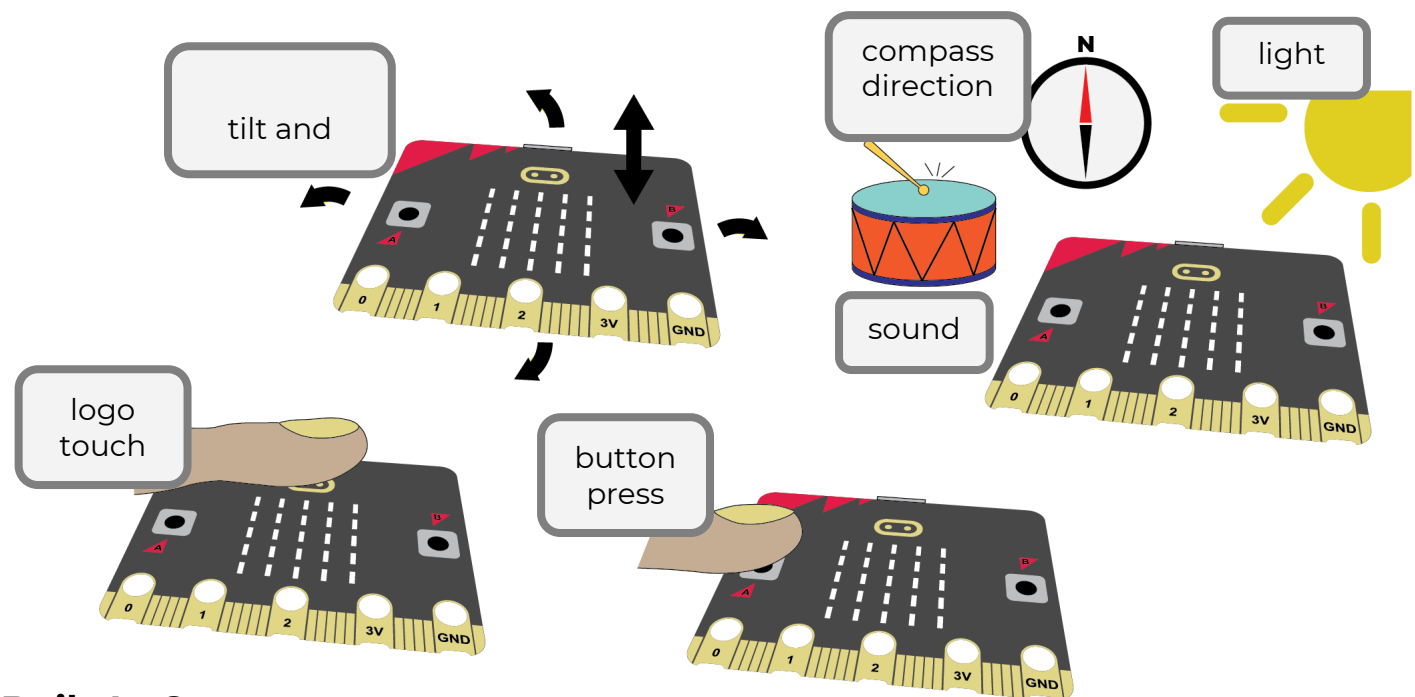
The micro:bit is a small microcontroller that can be programmed in a huge variety of ways to create exciting projects. There are a lot of features packed into this tiny device:



From: <https://microbit.org/get-started/features/overview/>

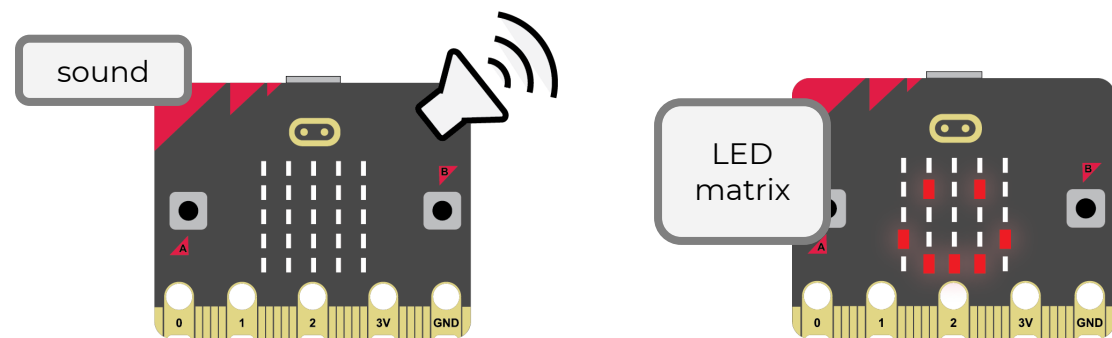
Built-In Sensors

The micro:bit has a variety of built-in sensors that you can use in your projects::



Built-In Outputs

There are also some built-in outputs:

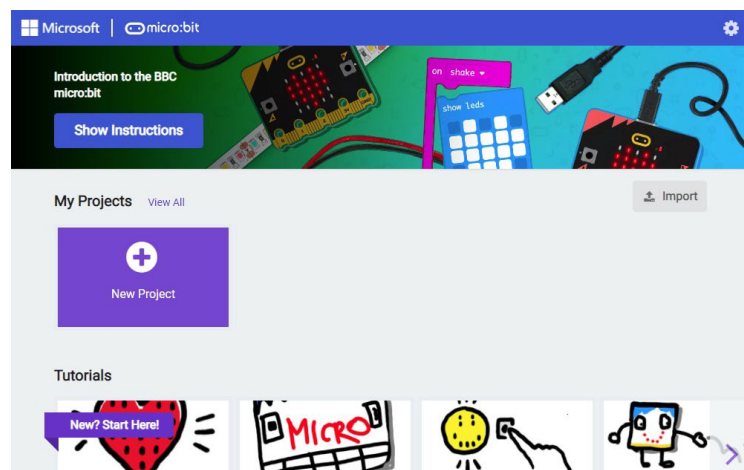


MakeCode

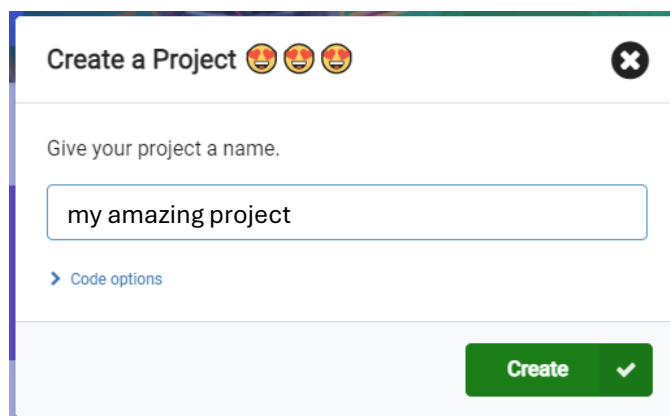
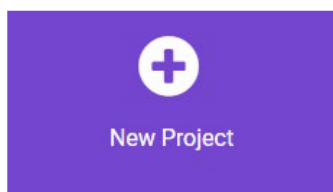
The micro:bit can be programmed using a very simple coding environment called Makecode. Code is created by dragging a dropping code blocks.

To create a Makecode project first visit the MakeCode website:

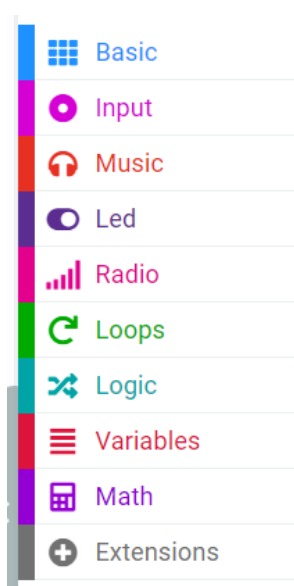
<https://makecode.microbit.org/>



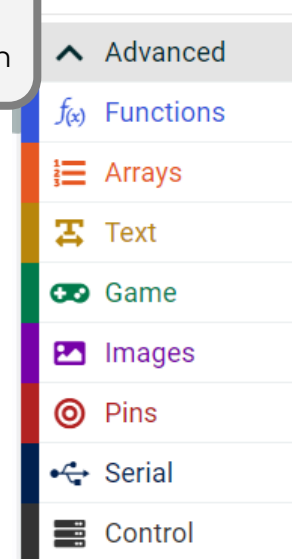
Then click on the New Project button and give the project a name:



You will see lots of categories of code blocks:

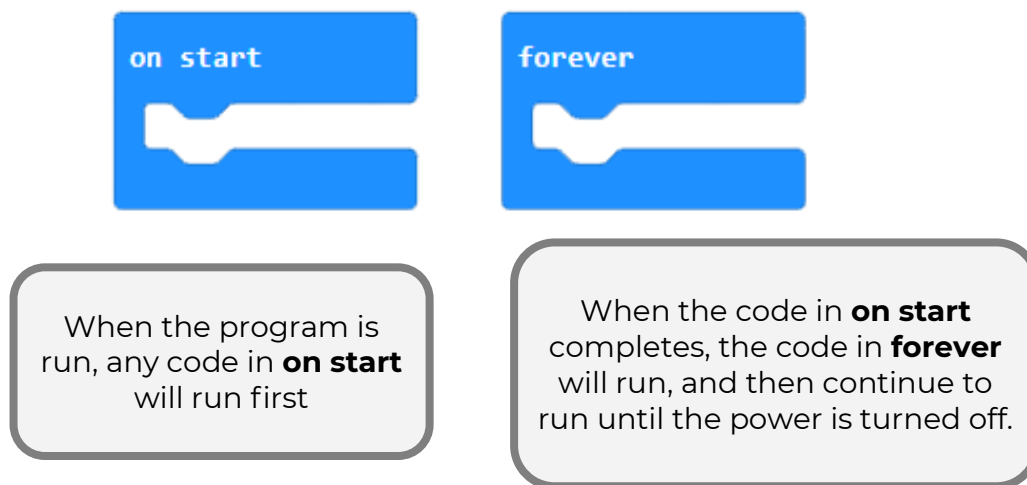


There are more blocks in the Advanced section

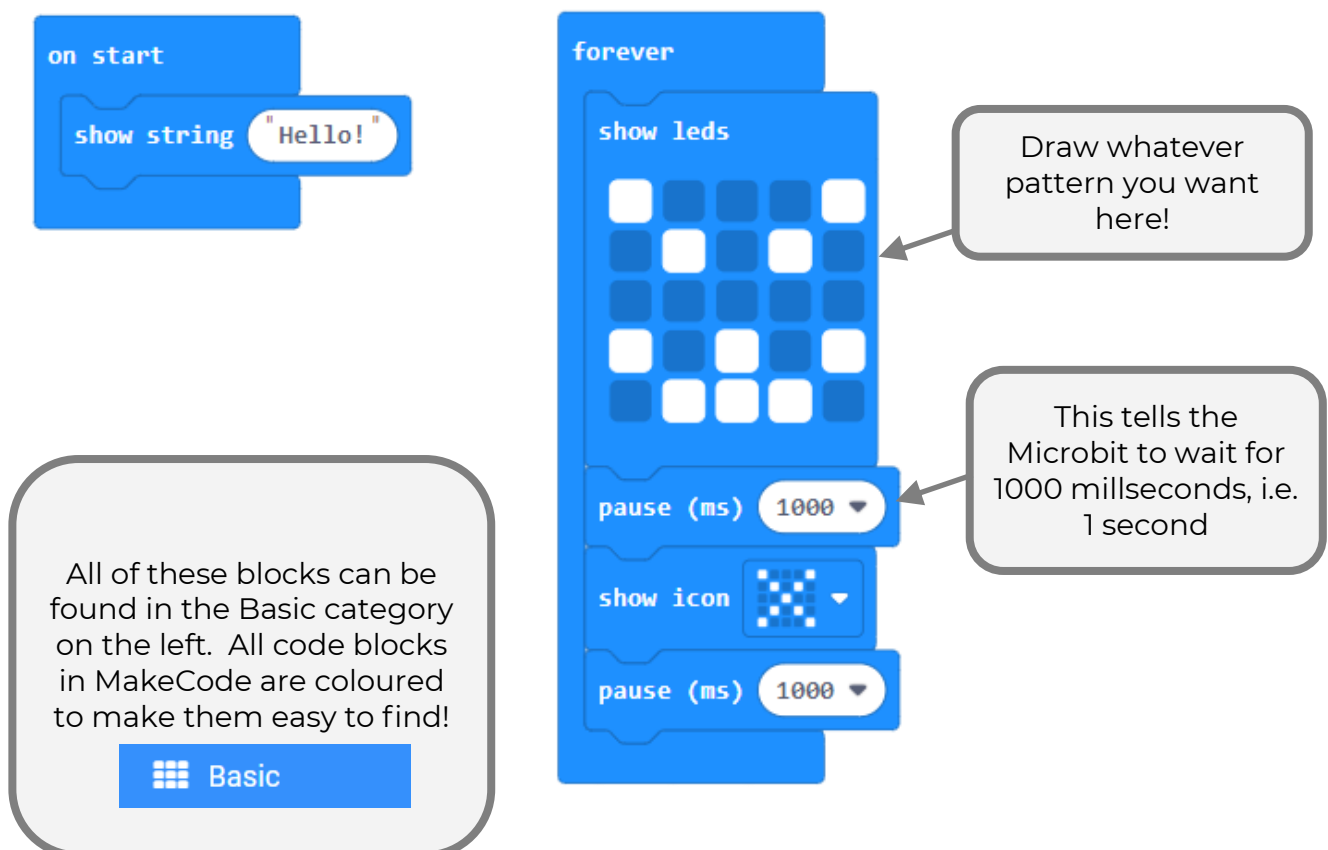


A First Program

Let's create a quick program on the micro: bit. Create a project in Makecode. You will see the on start and forever blocks:

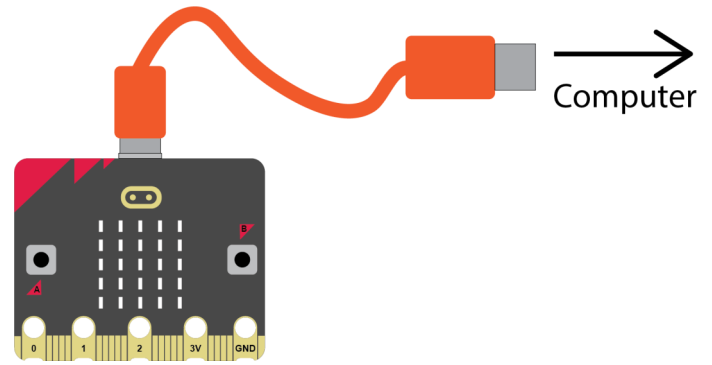


Create the following program by dragging blocks from the left into the **on start** and **forever** blocks:



Download your Program

Once you have created a program in MakeCode, you need to download it and copy it onto the micro:bit. First, connect the micro: bit to your computer using the USB cable:



Click the **Download** button to download the code from Makecode.

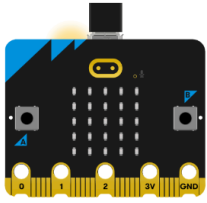


Pairing with your Computer

Follow the instructions to pair your micro: bit with your computer:

1

1. Connect your micro:bit to your computer



Next

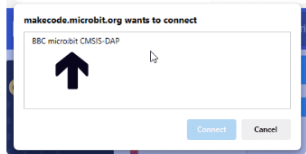
2

2. Pair your micro:bit to your browser

Press the Pair button below.

A window will appear in the top of your browser.

Select the micro:bit device and click Connect.

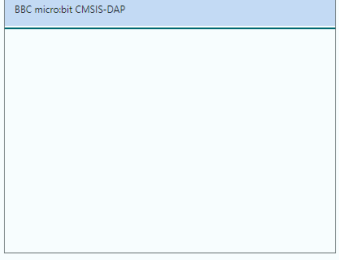


Download as File

Pair

3

makecode.microbit.org wants to connect



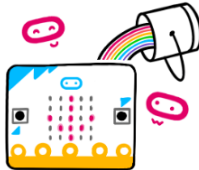
Connect

Cancel

4

Connected to micro:bit

Your micro:bit is connected! Pressing 'Download' will now automatically copy your code to your micro:bit.



Download

Now click download and the code will be copied to the micro: bit. You should see your program running on the micro: bit (the LED matrix should show the different things you coded).

Downloading as a File

If for some reason the pairing does not work, you can download the code as a file. The file should appear in your downloads folder. From there you can use File Explorer on Windows or Finder on the Mac to copy the file to your micro:bit , which should appear as a new device on your computer.

