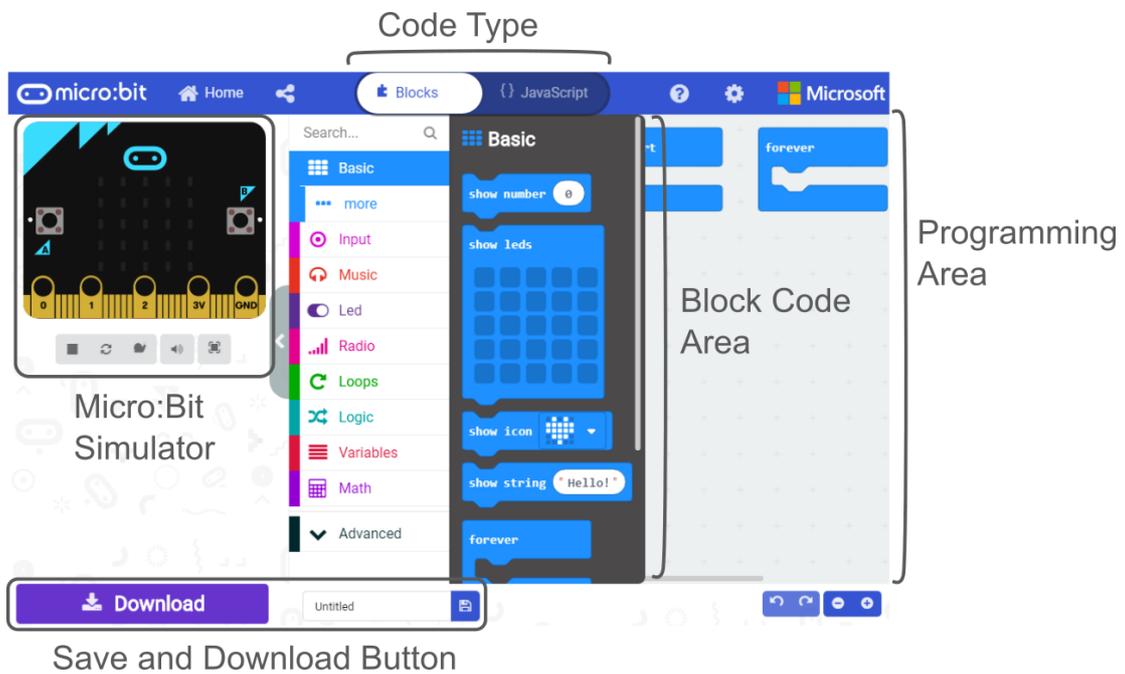
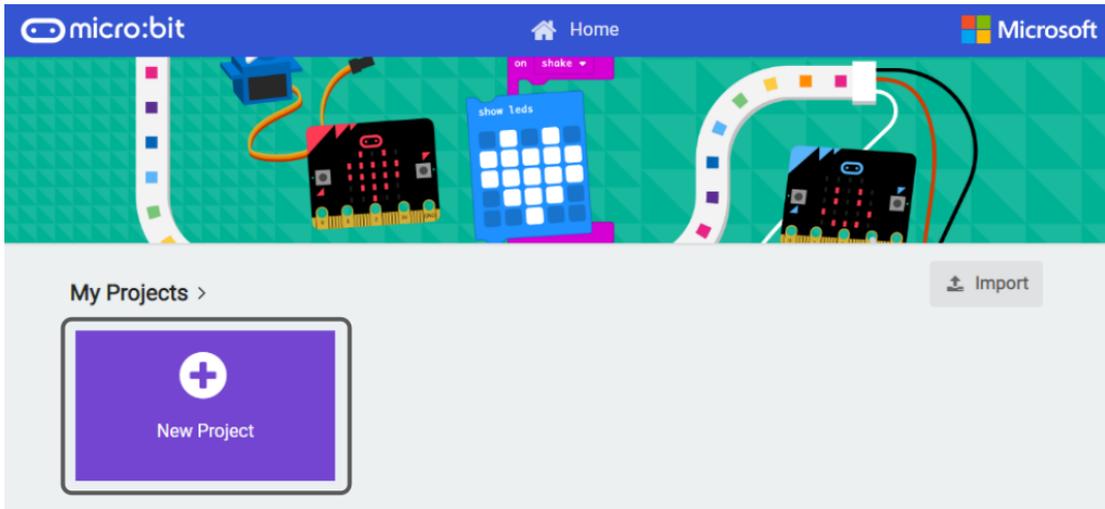
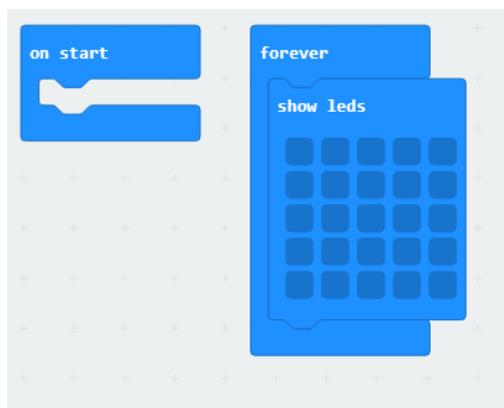


# Getting Started with Micro:Bit

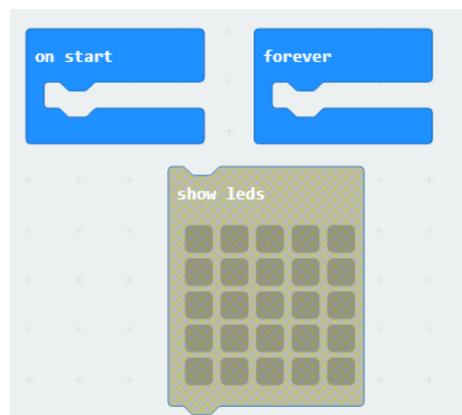
Open <https://makecode.microbit.org> and click 'New Project.'



Drag and drop blocks from the code area into the programming area. Blocks that are not correctly snapped into place will appear greyed out (see next page).

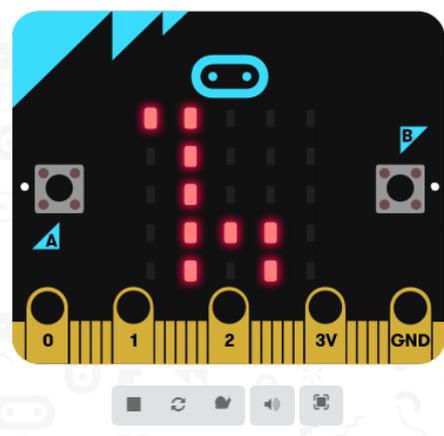
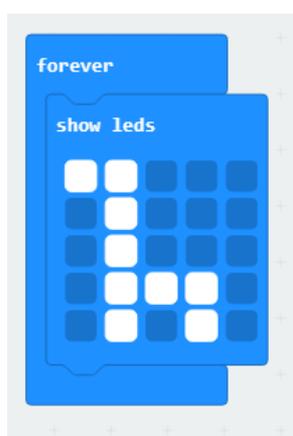


Correctly placed block



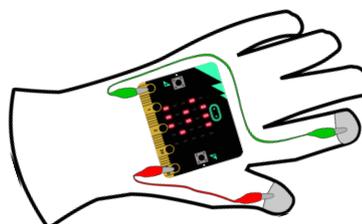
Incorrectly placed block

The Make Code programming environment has a built-in emulator that allows you to test your code before downloading it onto your Micro:Bit. Using the mouse, you can press buttons, shake the device, change its orientation, and adjust input to the pins.



## Getting inputs

A Micro:Bit has a number of inbuilt sensors and the capacity to attach more. They include a compass, accelerometer, thermometer, and a bluetooth antenna. The Micro:Bit can receive user input through a combination of two buttons, shakes, and tilts. There are large sized pins along the bottom of the device that can be used with crocodile clips or 4mm pins, along with a 3V output and a ground. With an adapter, there are a total of twenty-five usable pins!



## Downloading Your Code

Every modification that you make to your code will require you to reupload the code to your device.

### Using a computer, laptop, or Chromebook

To download and upload your code from a computer:

1. Plug the Micro:Bit into your device using a USB cable.
2. Click the large 'Download' button to start downloading the .hex file containing your code.
3. Locate the .hex file in your downloads folder.
4. Copy and paste (or drag and drop) the .hex file into the Micro:Bit folder.
5. The Micro:Bit will automatically shut the file system when the download is complete and you can remove the device.
6. Attach the Micro:Bit to a battery pack or USB charger to power it. Use!

### Using a mobile device or tablet

To pair your Micro:Bit with a phone or tablet:

1. Make sure you have downloaded the official [Micro:Bit app](#) to your device.
2. Select 'Choose Micro:Bit.'
3. Click 'Pair a new Micro:Bit' at the bottom of the screen.
4. Hold the A and B buttons and press and release reset.
5. Copy the pattern from your Micro:Bit onto your device and tap 'Next.'
6. Tap 'Next' to pair.
7. When asked for a code, press button A on Micro:Bit to see it (you will be asked to wait while your device searches for the Micro:Bit).
8. The Bluetooth Pairing Request alert should appear. Tap 'Pair' (if the alert doesn't appear within a few seconds, please go to Settings > Bluetooth and 'Forget' your 'Micro:Bit [name]').
9. Press 'Reset' once pairing is complete.

To send your code to your paired Micro:Bit:

1. Select 'Flash' from the main menu.
2. Make sure your Micro:Bit is showing in the top right hand corner of the screen.
3. Select your project from the grey dropdown menu and tap the 'Flash' button.
4. Your code will flash to the paired Micro:Bit. Do not interact with the Micro:Bit until process is complete.
5. Once flashing is complete, tap 'OK.' You're ready to go!