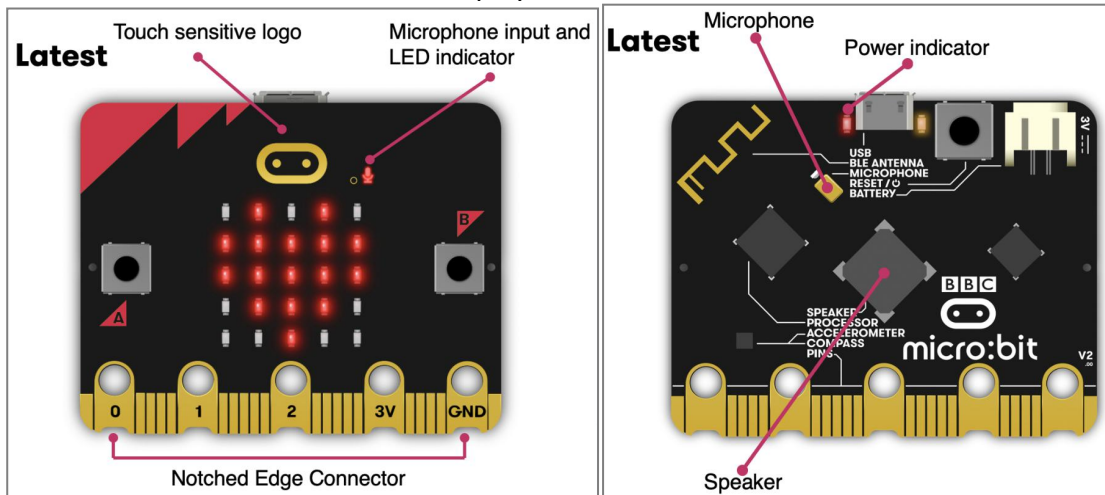


## Little mp3

### 1. Learning goals

In this lesson, we will learn to use the micro:bit on board buzzer and button. When we press button on Micro:bit, buzzer will play different music.



### 2. Mode 1 online programming:

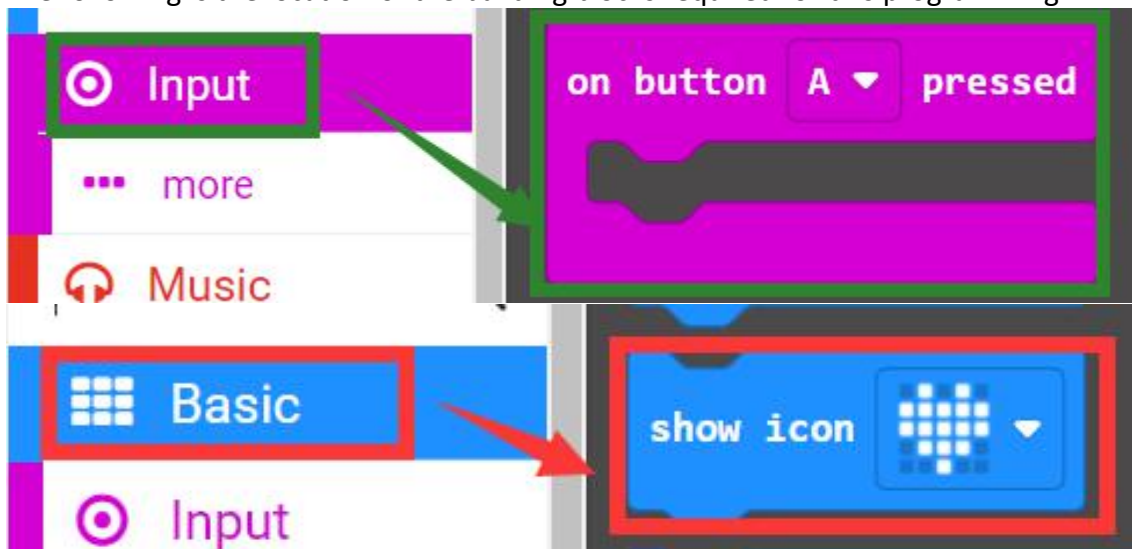
First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL <http://microbit.org/> in the USB flash drive to enter the programming interface to start program.

### Mode 2 offline programming:

We need to open the offline programming software. After the installation is complete, enter the programming interface, click **【New Project】**, you can start program.

### 3. Looking for blocks

The following is the location of the building blocks required for this programming.



The image shows a Scratch-like interface with a sidebar on the left and a script area on the right. The sidebar has several categories: Music (red), Led (purple), Radio (pink), Loops (green), Logic (teal), Variables (red), Math (purple), and Advanced (dark blue). The 'Music' category is selected, and the 'Math' block is being dragged into the script area. The script area contains a 'Melody Advanced' block with a 'start melody' button, a 'dadadum' dropdown, a 'repeating' dropdown, and an 'once' dropdown. Below this is an 'if-then-else' loop. The 'if' condition is 'true'. The 'then' block contains a 'start melody' button. The 'else' block contains a 'start melody' button. The 'Comparison' block is set to '0 = 0'. The 'Math' block is being dragged into the script area, and its 'pick random' block is highlighted, showing '0' to '10'.

Tempo (bpm)

Melody Advanced

start melody dadadum repeating once

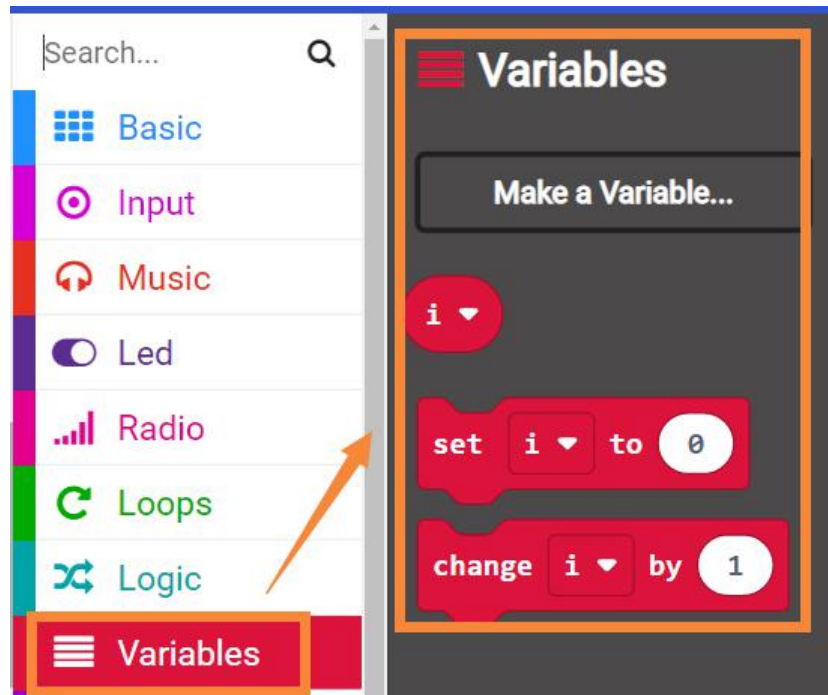
if true then

else

Comparison

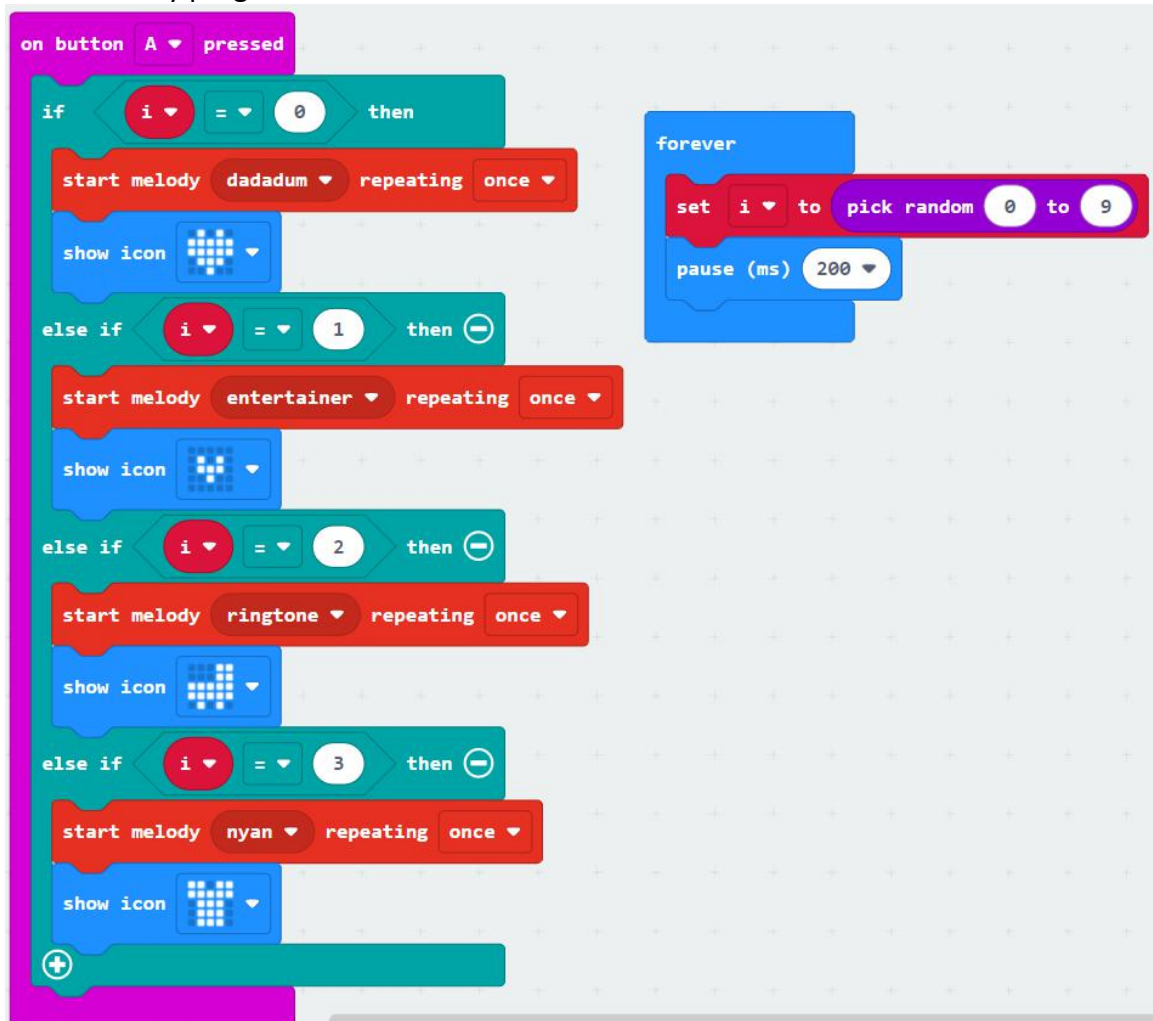
0 = 0

pick random 0 to 10



#### 4.Combine block

The summary program is shown below.



### **5.Experimental phenomena**

After connecting the computer to the micro:bit board via the micro USB data cable. Click download or save on the programming interface, and the program can be successfully downloaded to the Micro:bit board.

When we press button-A on Micro:bit board, buzzer will start play music. After playing, when we press the A button again, it will switch to the next song.