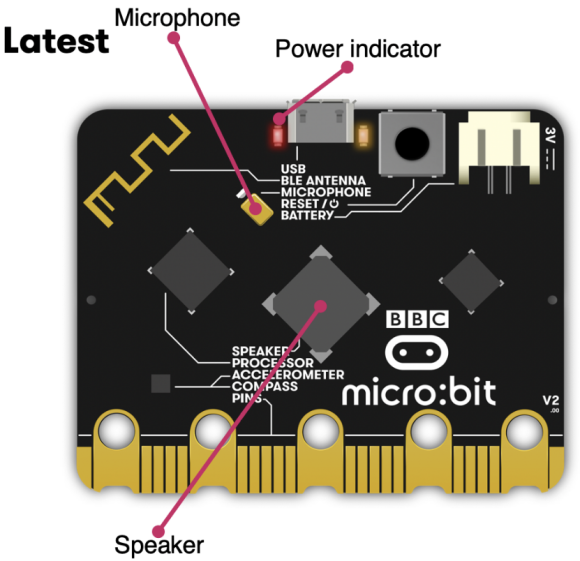
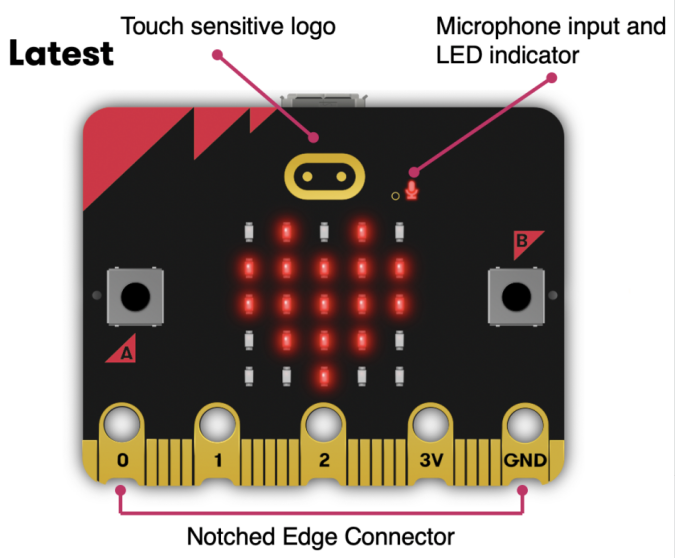
**Changing face**

# 1. Learning goals

In this lesson, we will learn how to switch the pattern on the dot matrix by touching the micro:bit logo.



1. **Mode 1 online programming:**

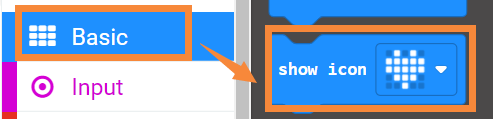
First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL http://microbit.org/ in the USB flash drive to enter the programming interface to start program.

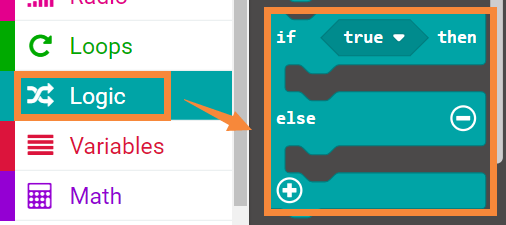
**Mode 2 offline programming:**

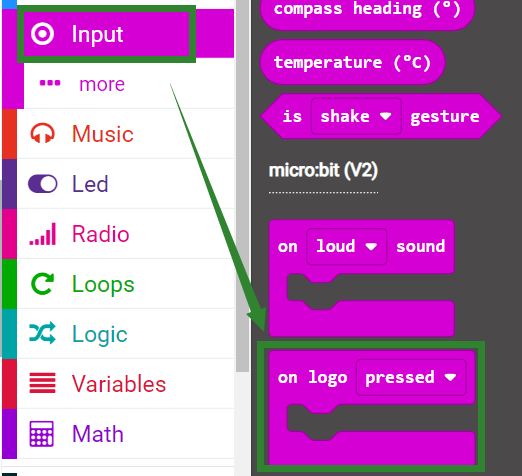
We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, you can start program.

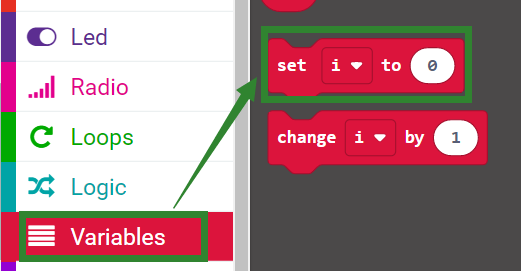
**3.Looking for blocks**

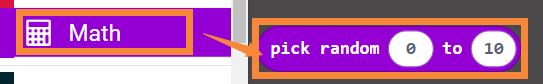
The following is the location of the building blocks required for this programming.





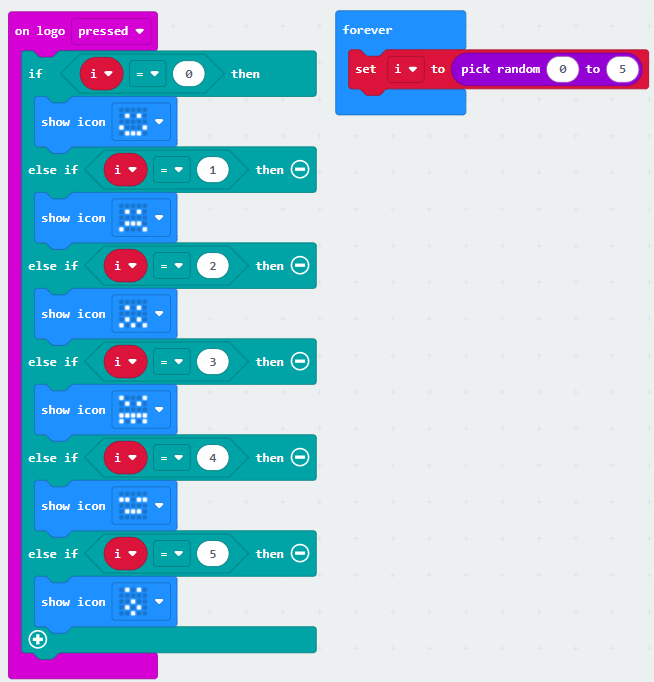




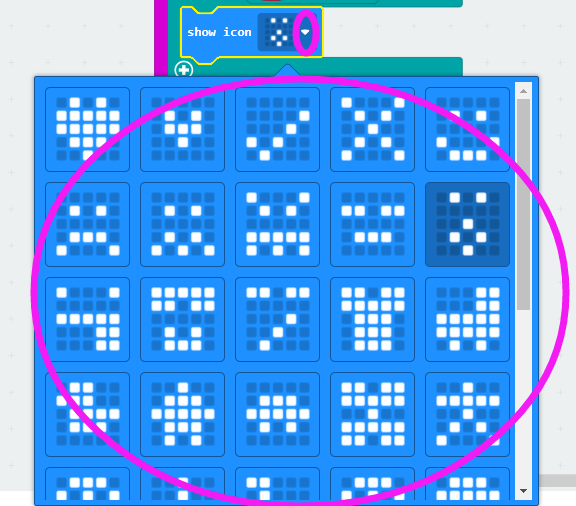


**4.Combine block**

The summary program is shown below.



# If you want to display other pattern, you can choose by yourself. As 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 you touch Logo on micro:bit board every time, the pattern will be displayed on dot matrix randomly.

