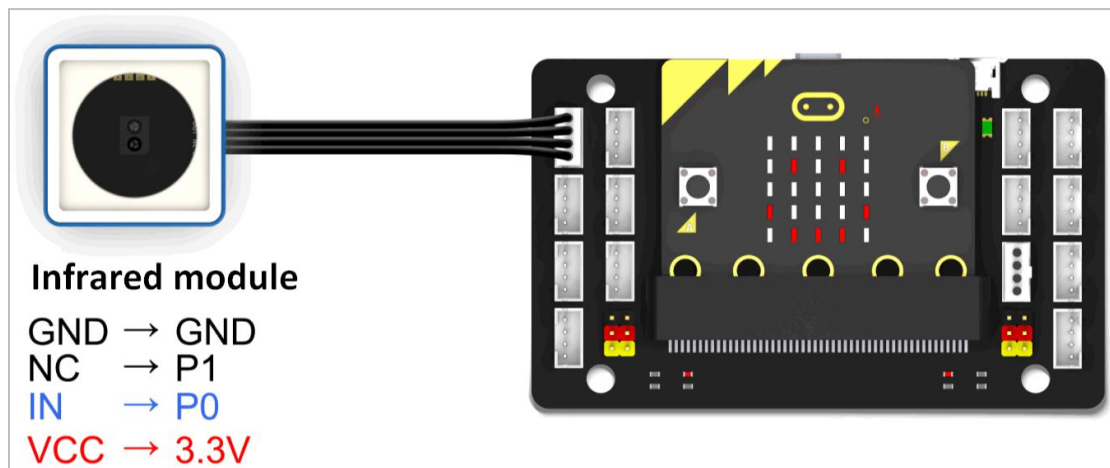**Infrared warning device**

1.Learning target

In this course, we will earn how to use Micro:bit, infrared module and buzzer module to make a infrared warning device.

2. Preparation

Connect the module to Micro:bit board by expansion board, as shown below.

Infrared module
GND → GND
NC → P1
IN → P0
VCC → 3.3V

3.Programming method

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 in the USB flash drive: http://microbit.org/ to enter the programming interface. Add the Yahboom package https://github.com/YahboomTechnology/Module-World to 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】, add Yahboom package:
https://github.com/YahboomTechnology/Module-World , you can start programming.

4.Looking for blocks

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

brightness

set brightness 255

led enable false ▼

if true ▼ then

else ⊖

⊕

IR pin P0P1 ▼ value Obstacle ▼

Button pin P0P1 ▼ value Press ▼

Collision pin P0P1 ▼ value NoCollis

Vibration pin P0P1 ▼ get

more

Radio

Loops

Logic

Radio

Loops

Logic

Variables

Math

Radio

Loops

Logic

Variables

Math

ModuleWorld_Digatal

Music

Led

Radio

Loops

Logic

1 ▼ beat

tempo (bpm)

Melody Advanced

start melody dadadum ▼ repeating once ▼

5.Combine block

The summary program is shown below.
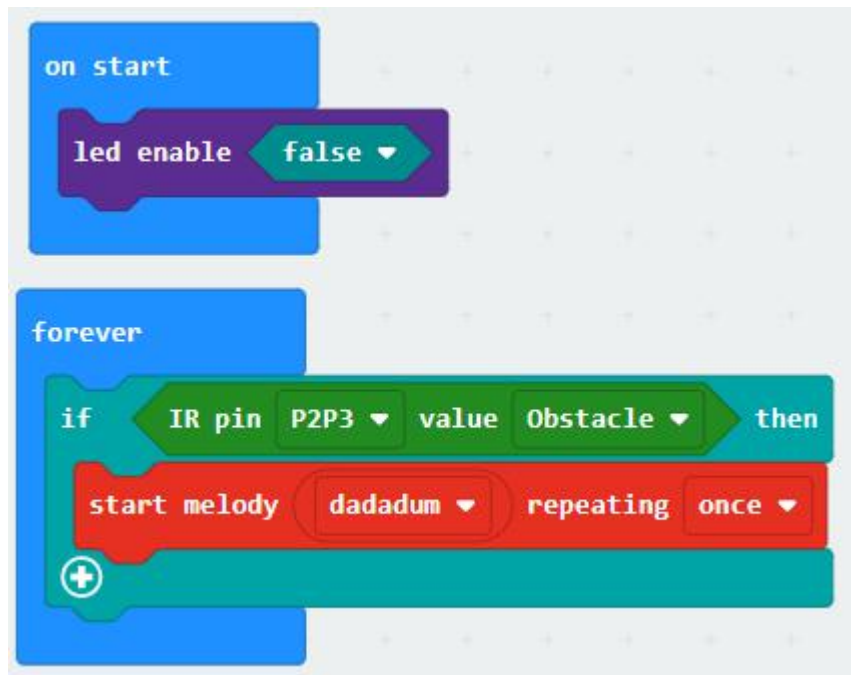
5. Phenomenon

After the program is downloaded successfully. When the infrared sensor detects an obstacle, the buzzer will sound.