

## Sing

### 1. Learning goal

In this lesson, we will learn how to realize make buzzer make a sound by graphical programming.

### 2. Looking for building blocks

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

K1 Button, Buzzer Play Tone and Music melody blocks.



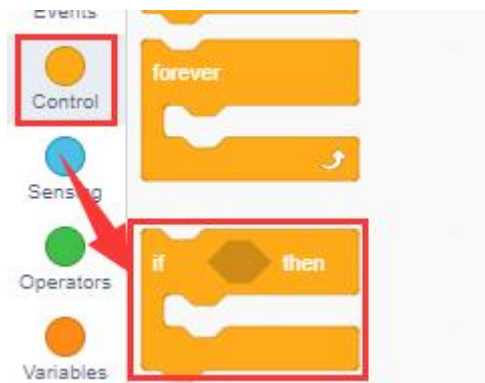
2.1 Buzzer Play Tone block, you can choose Tone and Beats.



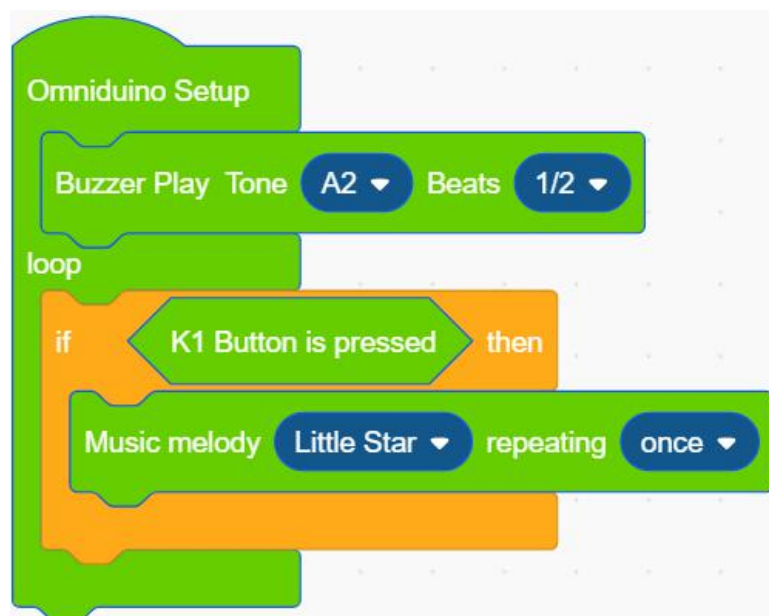
2.2 Music melody block can choose the song to be played and the number of repetitions.



2.3 Control category: if...then.

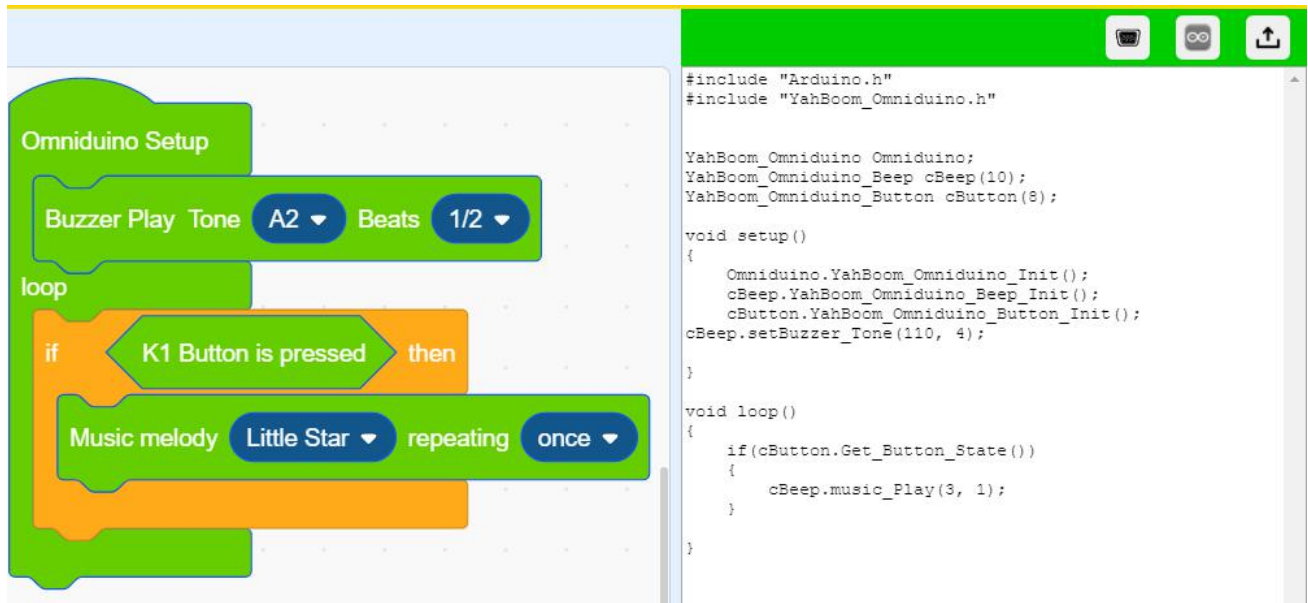


Combine blocks



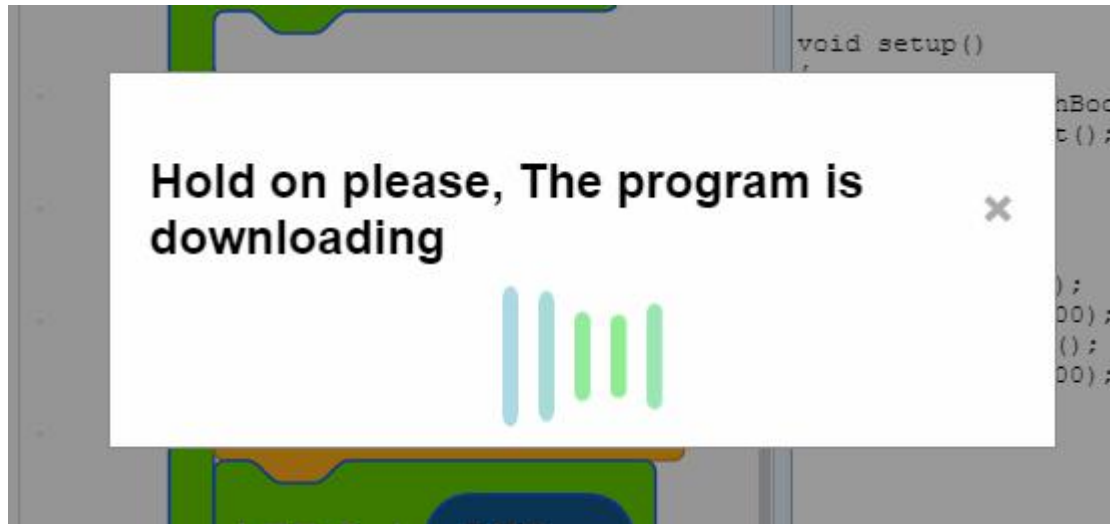
### 3. Compiling and uploading the program

3.1 After building the blocks, click the **[code mode]** in the upper right corner of the Helloblock programming interface. We can see the corresponding Arduino code.



3.2 Then, you need to connect Omniduino car to your computer. Select the CH340 port number identified in the previous step in the upper right corner. Then, click the up arrow to start compiling and uploading the program.





3.3 When the words "**Done compiling Done uploading**" appear in the lower right corner of the programming interface, which means the program has been uploaded.

```
C:\Users\Administrator\AppData\Local\Arduino15\logs
/application.log
DEBUG StatusLogger All asynchronous threads have
terminated
DEBUG StatusLogger RollingFileManager shutdown
completed with status true
>DEBUG StatusLogger Shut down RollingFileManager
C:\Users\Administrator\AppData\Local\Arduino15\logs
/application.log, all resources released: true
>TRACE StatusLogger XmlConfiguration stopped 2
remaining Appenders.
TRACE StatusLogger XmlConfiguration cleaning
Appenders from 2 LoggerConfigs.
>DEBUG StatusLogger Stopped
XmlConfiguration[location=jar:file:/C:/Program%20Fi
les%20(x86)/HelloBlock/resources/Arduino/lib/pde.ja
r!/log4j2.xml] OK
>DEBUG StatusLogger Stopped
LoggerContext[name=1e6f5c3,
org.apache.logging.log4j.core.LoggerContext@16bc455
] with status true
>Done compiling. Done uploading!
```

#### 4. Experimental phenomenon

After the program is downloaded. We heard the buzzer make a sound.  
When we press K1 button every time, the buzzer will sing the little star.