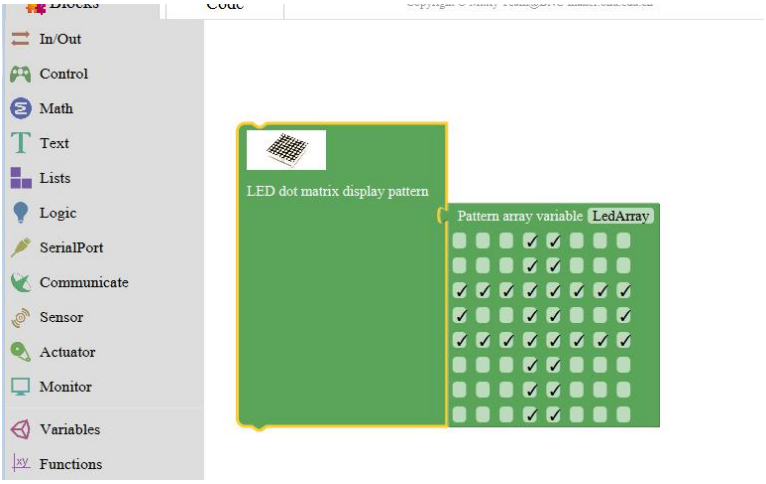
Course11--8x8 lattice

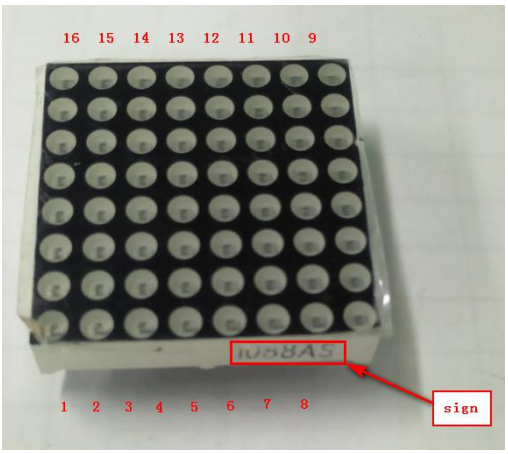
You need to follow the steps below to build blocks.



Introduction of 8x8 dot matrix:

The 8x8 lattice is composed of 64 LED, and each LED is placed at the intersection of line and line. When one line is high level(1) and a column is low level(0), the corresponding diode will be bright. If you want to light up the first line, the ninth pin need to high level, and (13, 3, 4, 10, 6, 11, 15, 16) these pins are low level. If you want to light up the first column, the thirteenth pin need low level, and (9, 14, 8, 12, 1, 7, 2, 5) these pins are low level.

Pin identification as shown in the two figures below

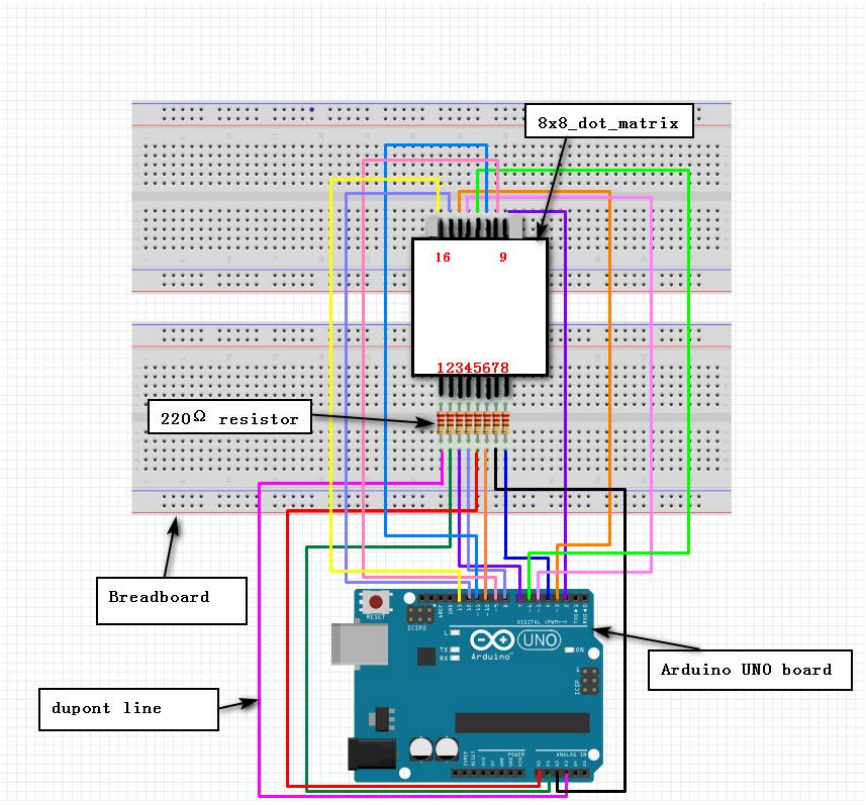


List of components required for the experiment:

Arduino UNO board *1
USB cable *1
220Ω resistor *8
8x8 dot matrixLED*1
Breadboard *1
dupont line *1bunch

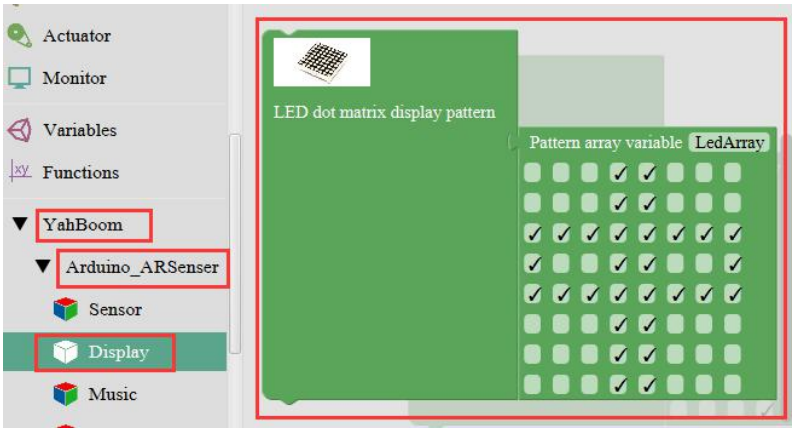
Actual object connection diagram:

We need to connect the circuit as shown in the figure below.

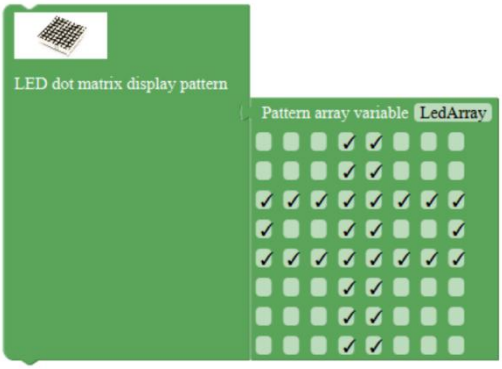


Steps of experiment:

1.You need to choose the building blocks which you need for this experiment, as shown in the figure below.

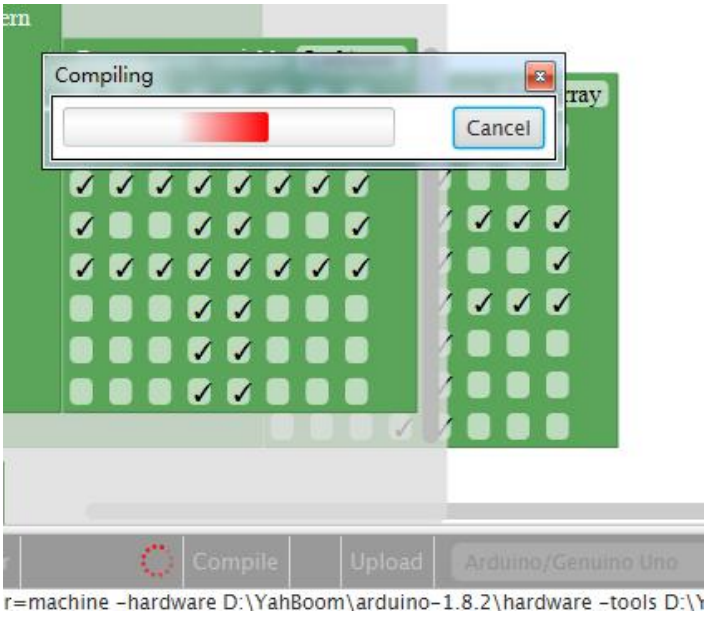


2.You need to combine the selected blocks, as shown in the figure below.

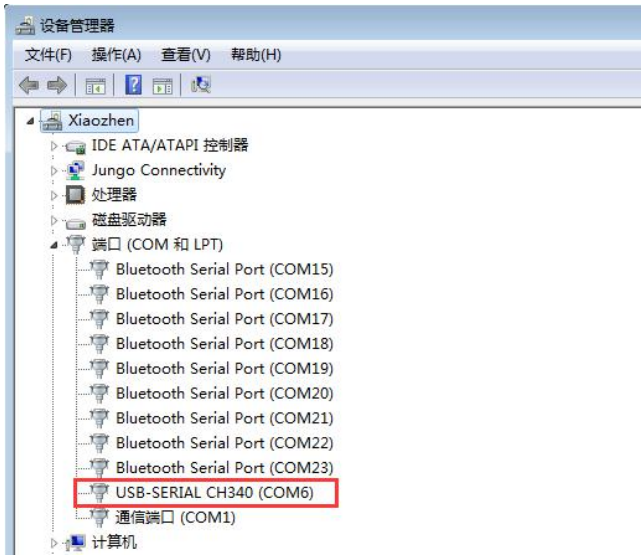


3.You need to you need to click “**Compile**”. and wait for the completion of the compiler, the following box will prompt the compiler successfully, if prompt the compile failure is the problem of building block splicing.

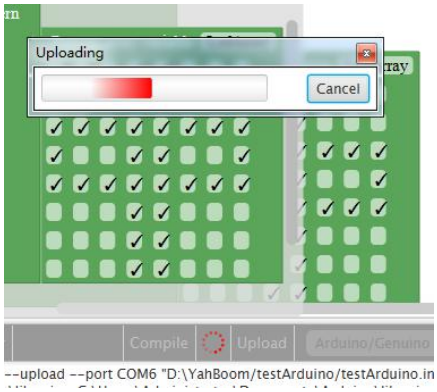
4. After the compilation is completed, the word "**Compile success!**" will appear in the lower left corner, indicating that you have successfully compiled the program.

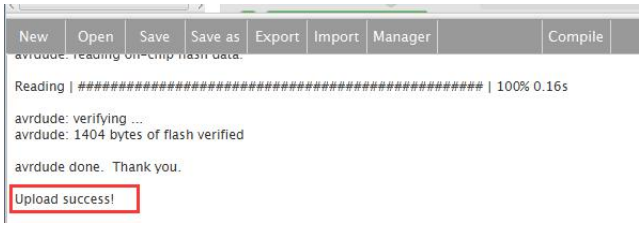


5. In the menu bar of Mixly, we need to select the port that the serial number displayed by the device manager (for exmaple:COM6) and **Arduino/Genuino Uno.** As shown in the figure below.



6. After the selection is completed, you need to click "**Upload**" to upload the code to the Arduino UNO board. When the word "**Upload success**" appears in the lower left corner, the code has been successfully uploaded to the Arduino UNO board, as shown in the figure below.





7. After the code is uploaded.We can see that the word "中" is displayed on the 8*8 dot matrix.