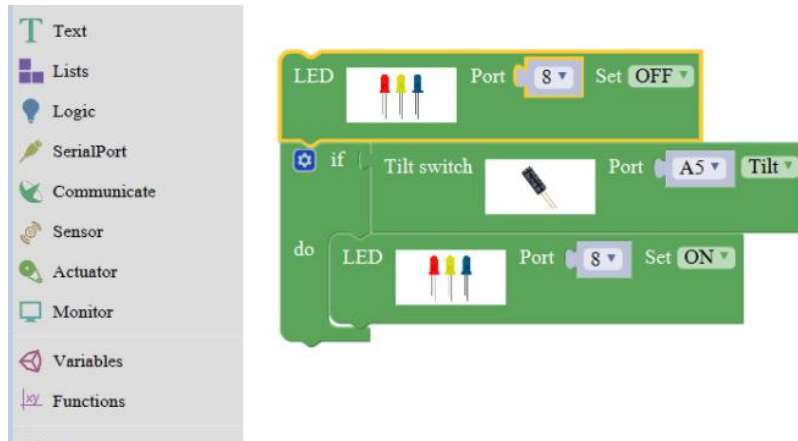


Course12--Tilt switch

You need to follow the steps below to build blocks.

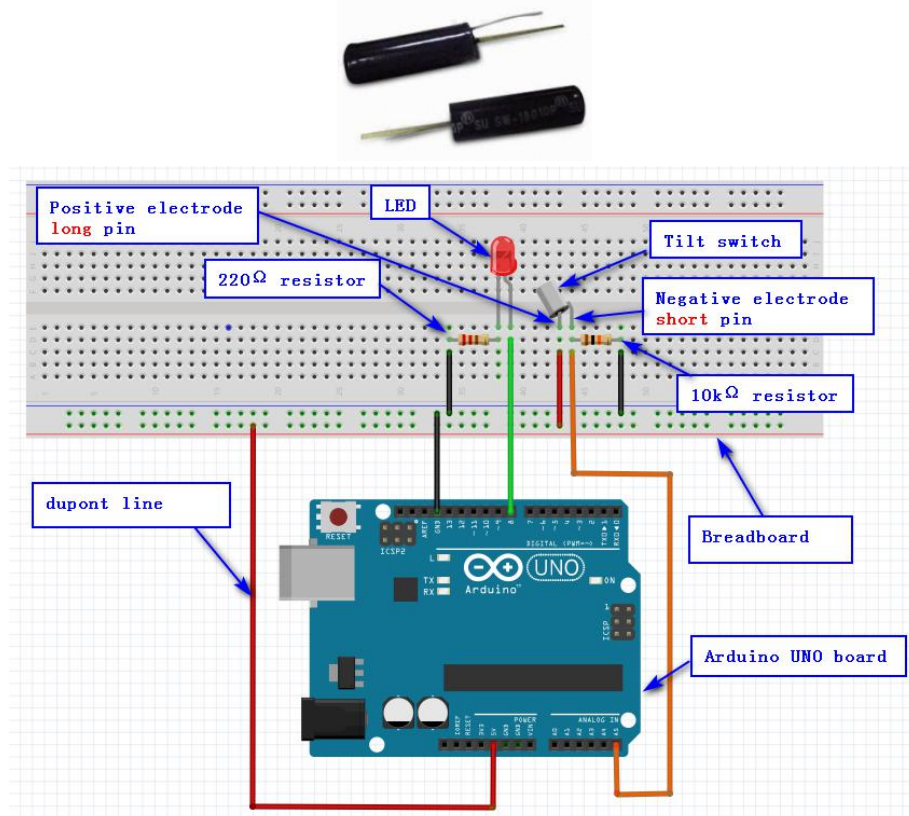


List of components required for the experiment:

Arduino UNO board *1
 USB cable *1
 220 Ω resistor *1
 10k Ω resistor *1
 Tilt switch *1
 Breadboard *1
 Dupont line *1 bunch

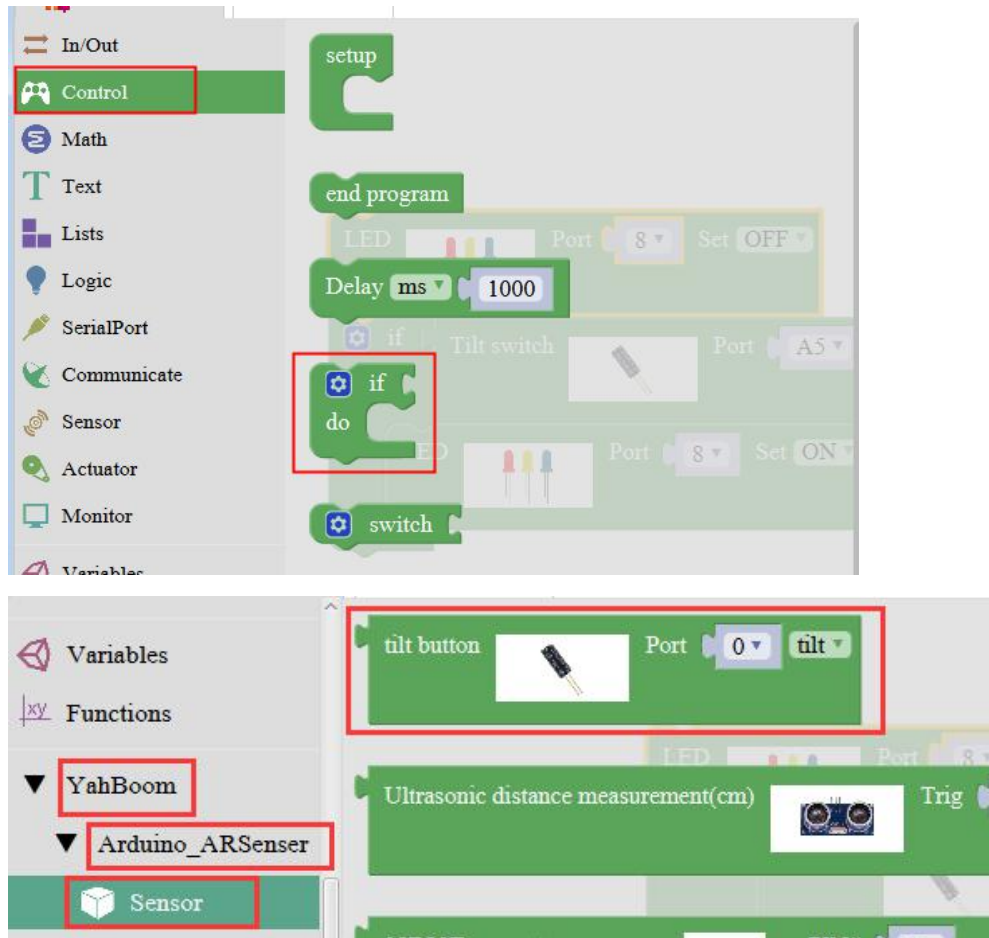
Actual object connection diagram:

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

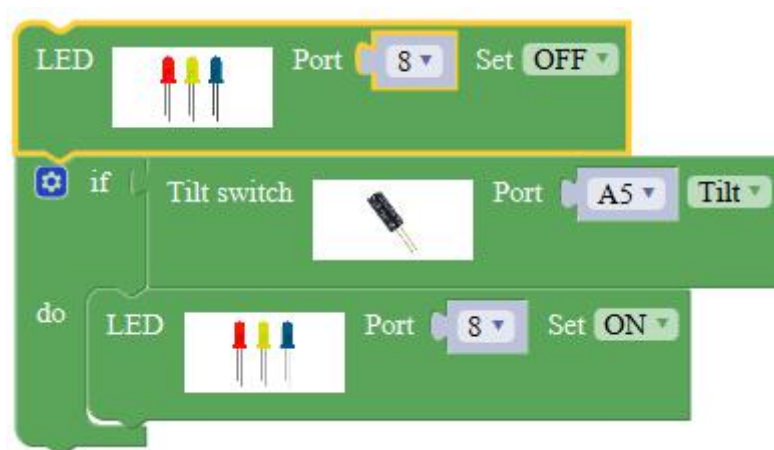


Steps of experiment:

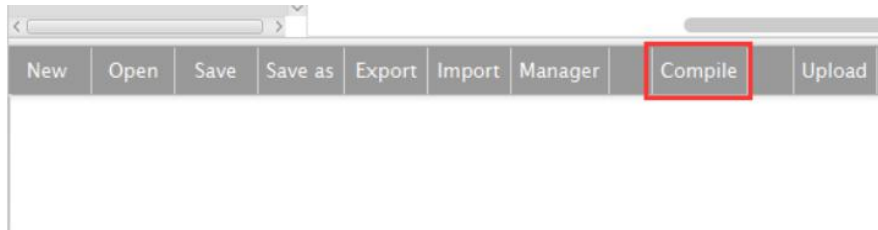
1. You need to choose the building blocks which you need for this experiment, as shown in the figure below.



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



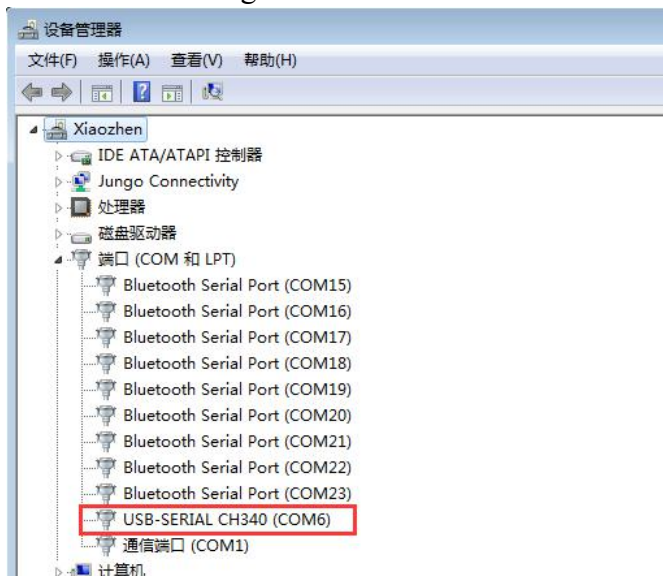
3. You need to click “**Compile**”. and wait for the completion of the compiler, the following box will prompt the compiler successfully, if prompt the compile failure is the problem of building block splicing.



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.

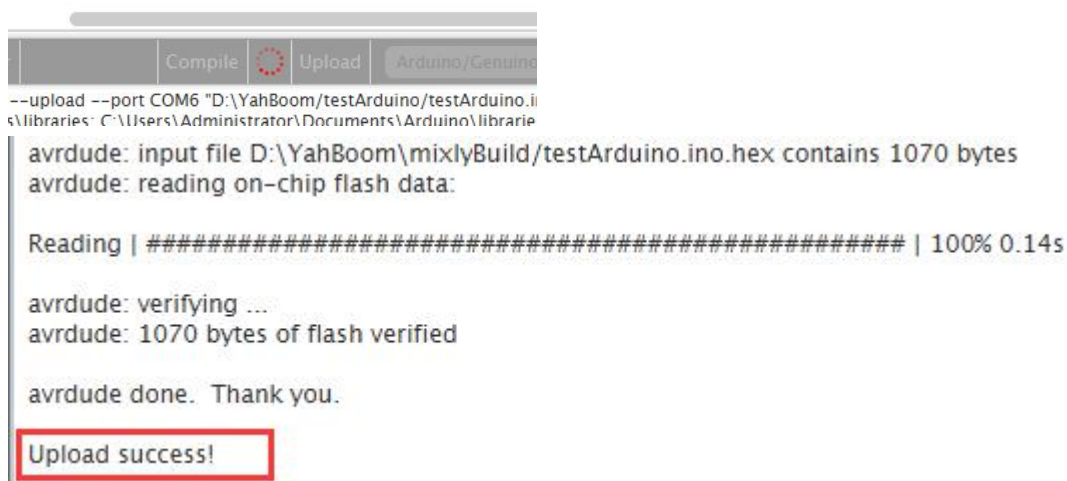
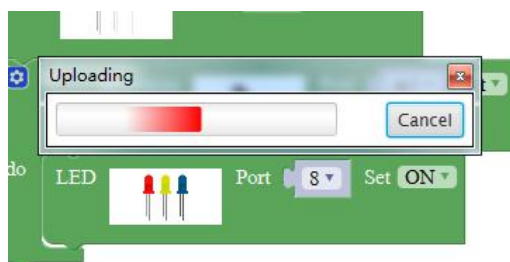


5. In the menu bar of Mixly, we need to select the port that the serial number displayed by the device manager (for exmaple:COM6) and **Arduino/Genuino Uno**. As shown in the figure below.





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. The LED lights up when the ball switch is in the horizontal position, and the LED turns off when we put the ball switch in the tilt position., At the same time, we can open the serial port monitor, we can also see the change of the voltage value at both ends of the ball switch, as shown in the figure below.

