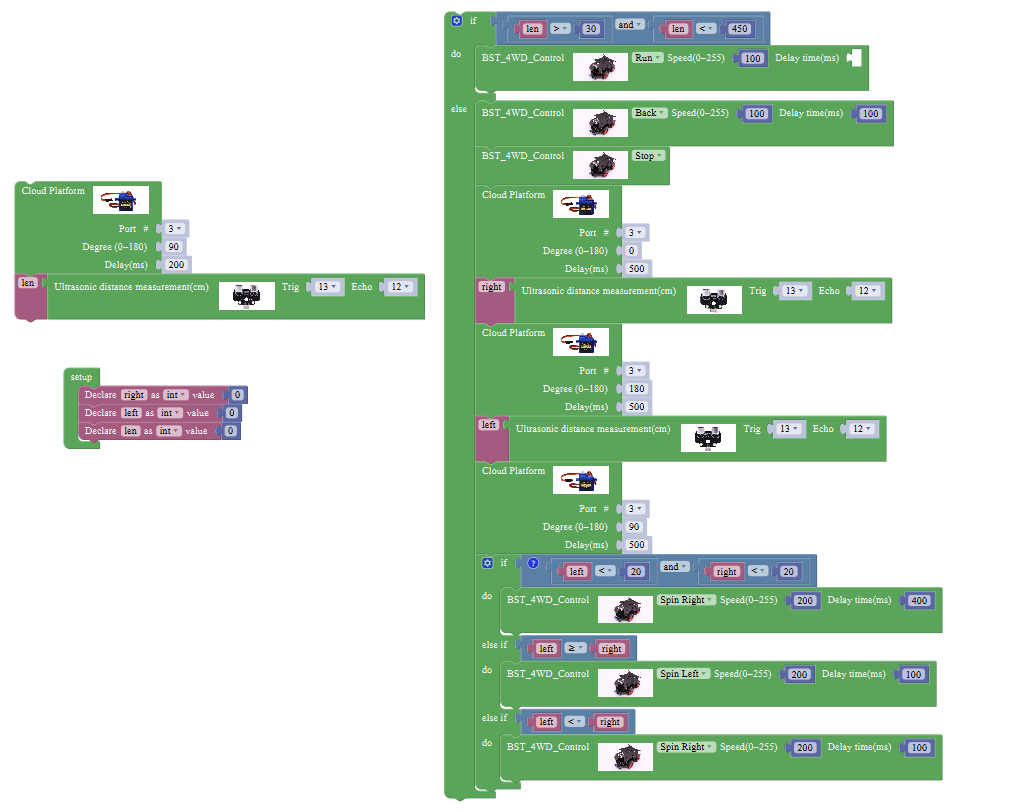
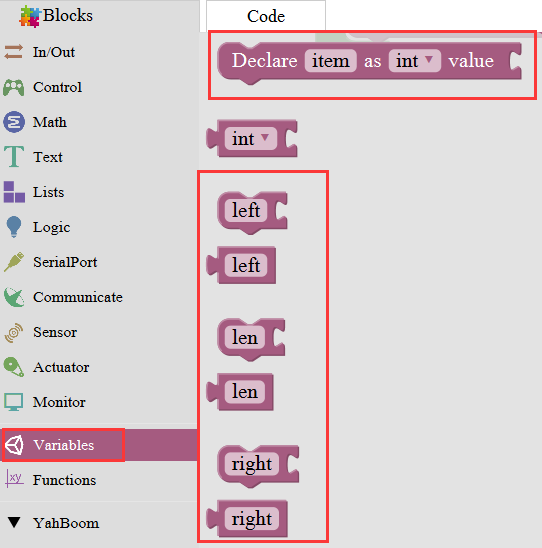
**Course11--servo\_ultrasonic\_avoid**

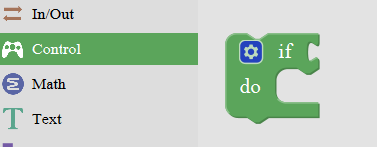
You need to follow the steps below to build blocks.

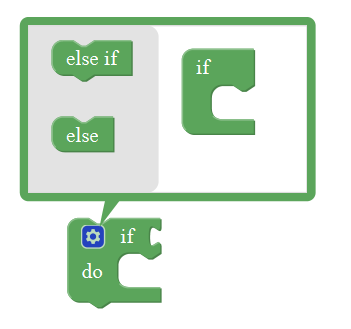
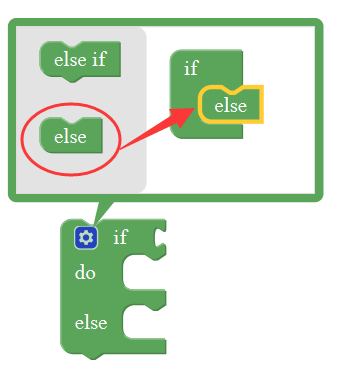


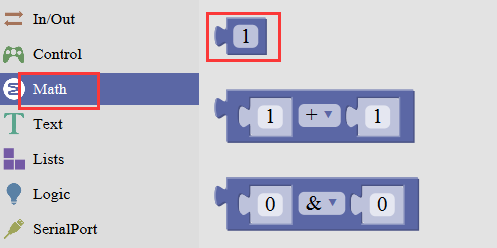
**Steps of experiment:**

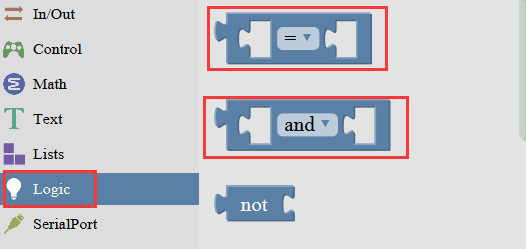
1.You need to choose the building blocks which you need for this experiment, as shown in the figure below.

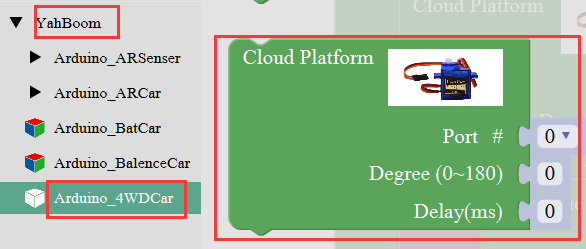


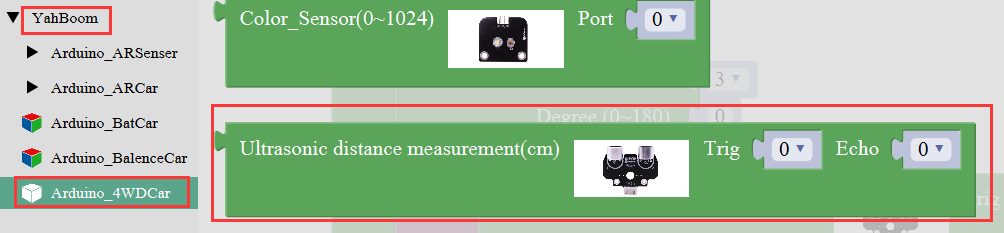




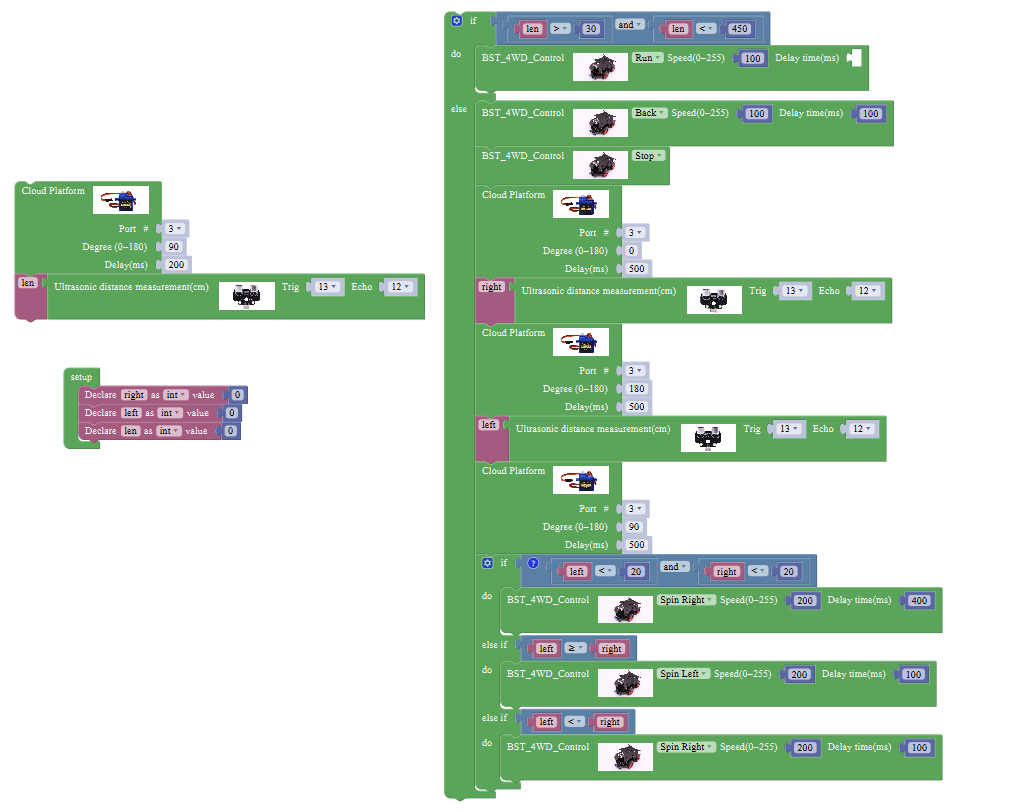




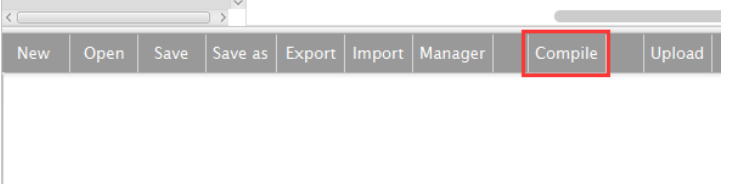




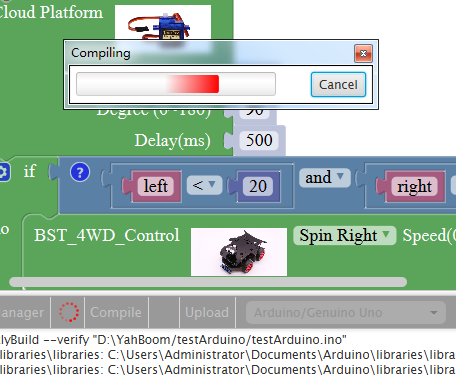
2.You need to combine the selected blocks, as shown in the figure below.



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.



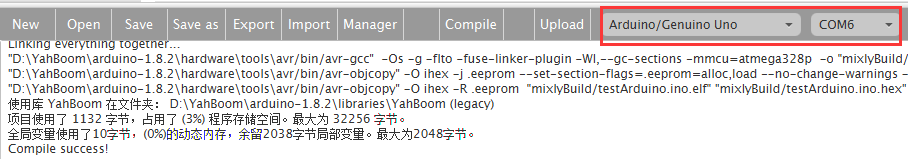
1. After the compilation is completed, the word "**Compile success!**" will appear in the lower left corner, indicating that you have successfully compiled the program.





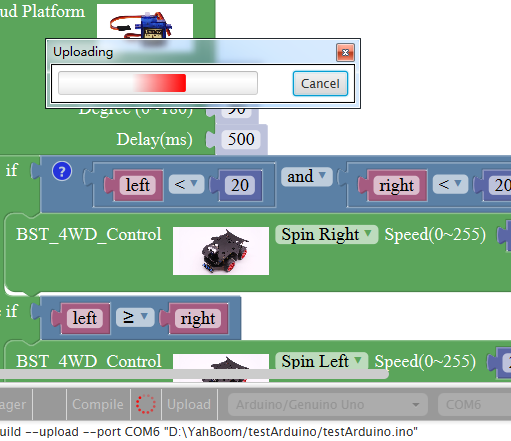
1. In the menu bar of Mixly, we need to select the port that the serial number displayed by the device manager (for exmaple:COM6) and **Arduino/Genuino Uno.** As shown in the figure below.

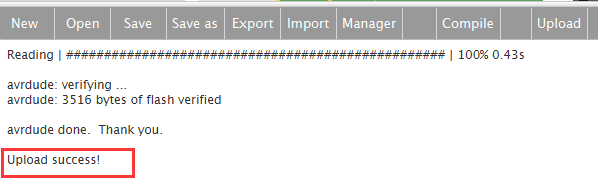




1. After the selection is completed, you need to click “**Upload**” to upload the code to the Arduino UNO board. When the word “**Upload success**” appears in the lower left corner, the code has been successfully uploaded to the Arduino UNO board, as shown in the figure below.







7.After the code is uploaded. When the distance on the front is more than 30cm, the car advance. When the distance on the front is less than 30cmthen servo turn to 0 degree, ranging and recording, servo turn to 180 degree, ranging and recording, servo turn to 90 degree, ranging and recording. And the robot car will compare the left and right distance to determine whether to avoid the obstacle to the left or right. When the distance in three directions is less than 20, the robot car will turn round.