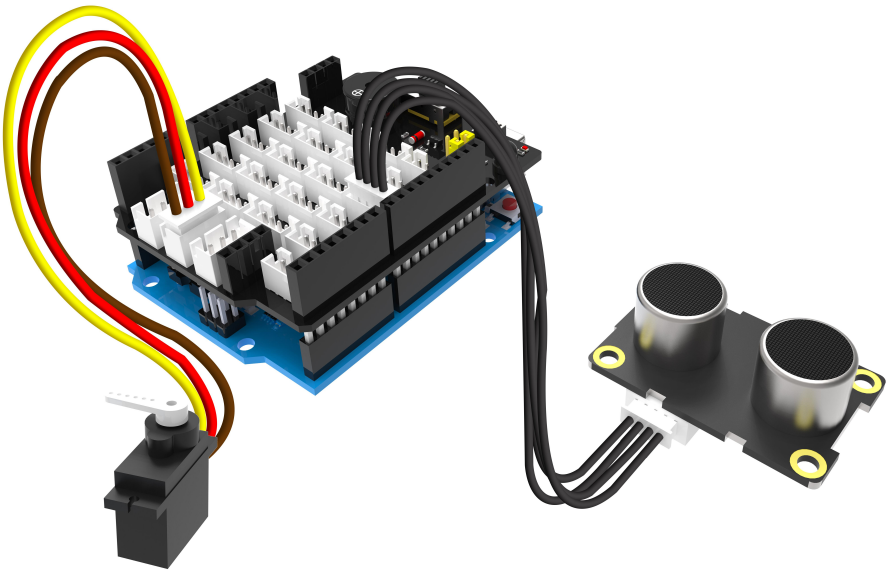
Experimental content: When the ultrasonic module detects that someone is coming, open the door in the home, and close the door when people enter the home.

Experiment preparation: UNO board *1, Plugkit sensor expansion board *1, 4pin cable (PH2.0) * 1, USB data cable *1, Ultrasonic sensor module *1, 9G metal digital servo *1.

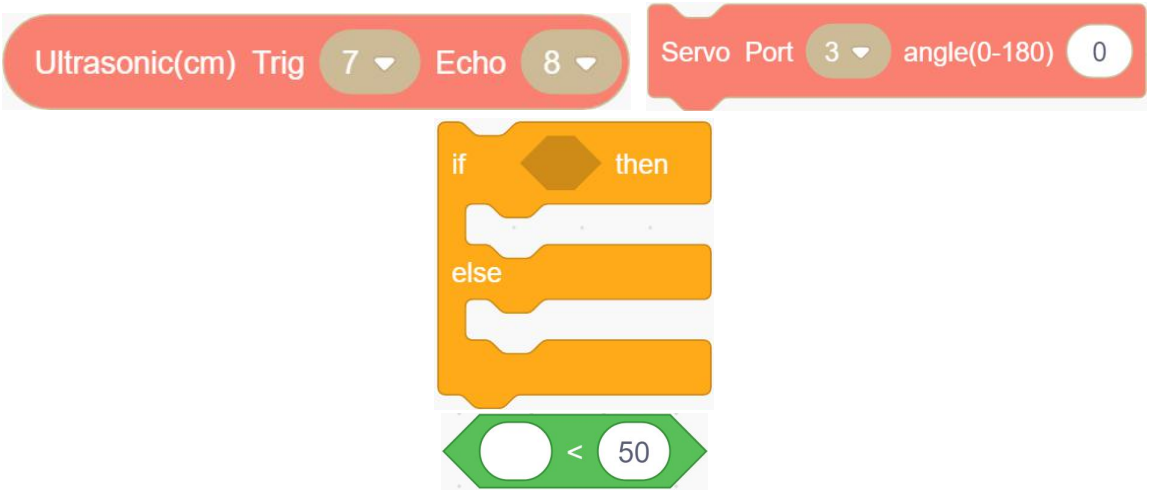
Experimental wiring:



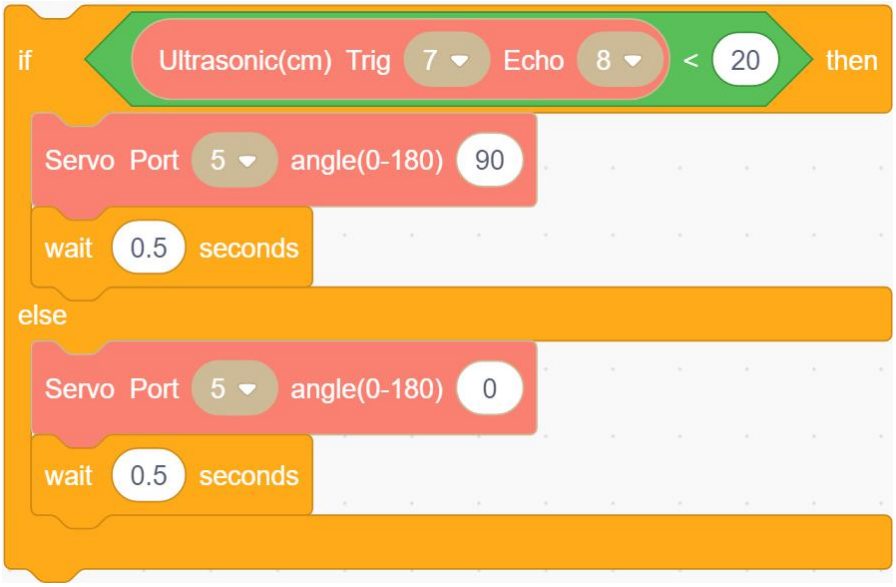
Servo is connected to the interface of the sensor expansion board with silk screen (~5,5V,GND).

Experimental steps:

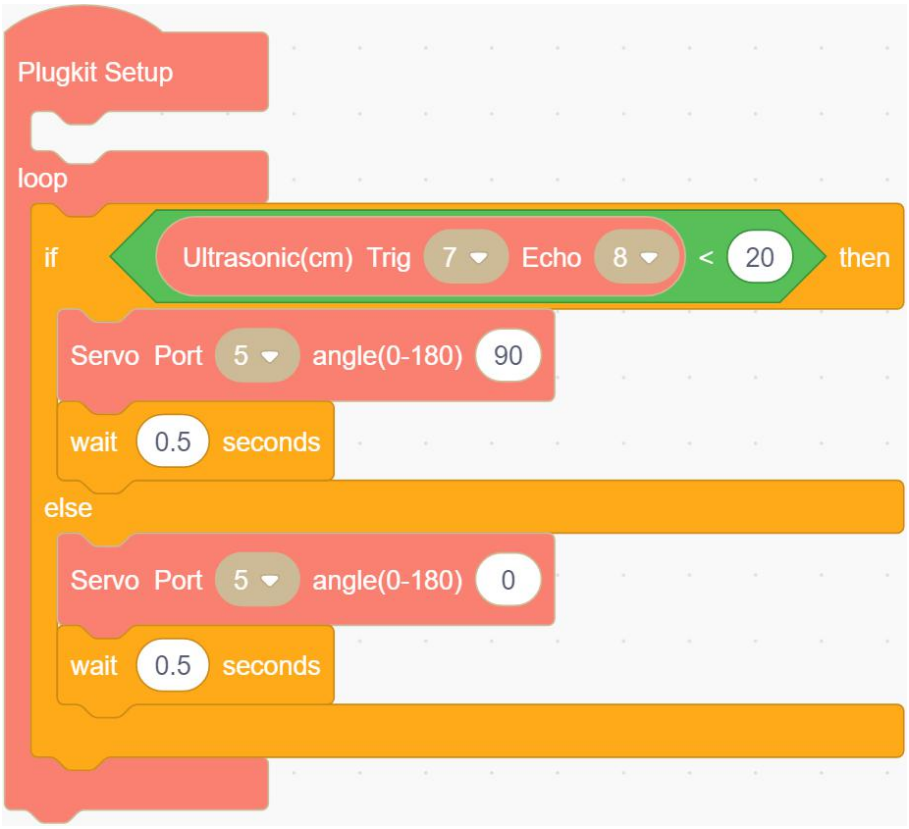
1.Select the following blocks in the [Plugkit], [Control].



2.If the distance recognized by the ultrasonic module is less than 20, the servo rotate to 90°, otherwise, the servo rotate to 0°. Add wait 0.5 seconds blocks is to prevent the fan from switching too fast to stop and cause the device to restart.



3.Put the block combination of step 2 into the loop block.



4.Compiling and uploading programs.

Experimental phenomena: If the distance recognized by the ultrasonic module is less than 20, the servo rotate to 90°, open the door, otherwise, the servo rotate to 0°, close the door.