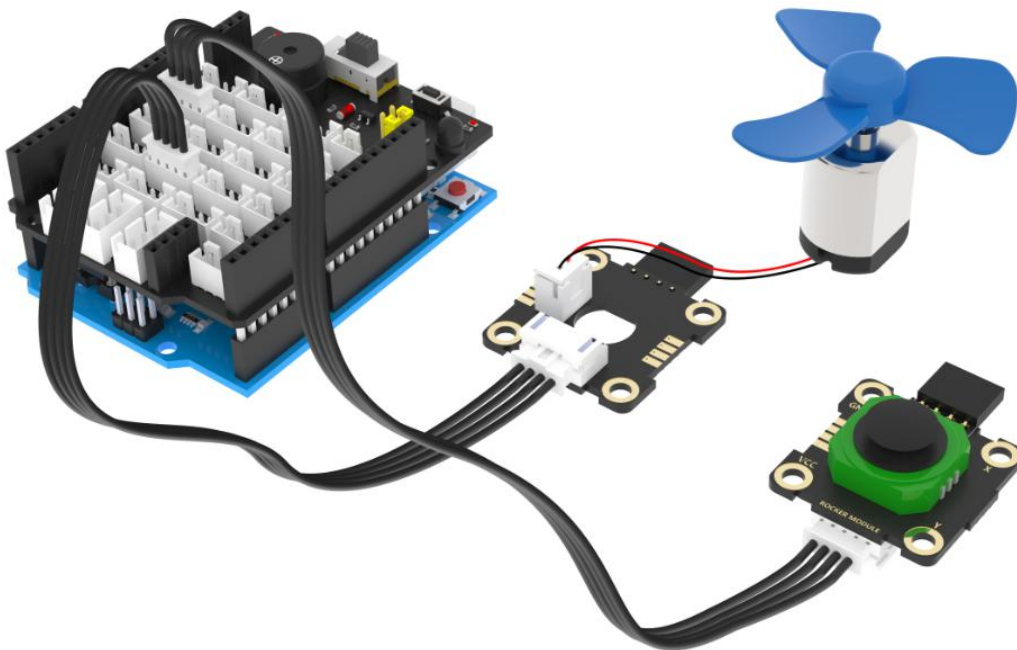


Experimental content: Adjust the wind speed through the x-axis direction of the rocker. The wind speed decreases toward the left side of the x-axis, and the wind speed increases toward the right side of the x-axis. The wind speed range (0 ~ 100).

Experiment preparation: UNO board *1, Plugkit sensor expansion board *1, USB data cable *1, 4pin cable(PH2.0) *2, Motor drive module *1, Motor fan *1, Rocker module *1

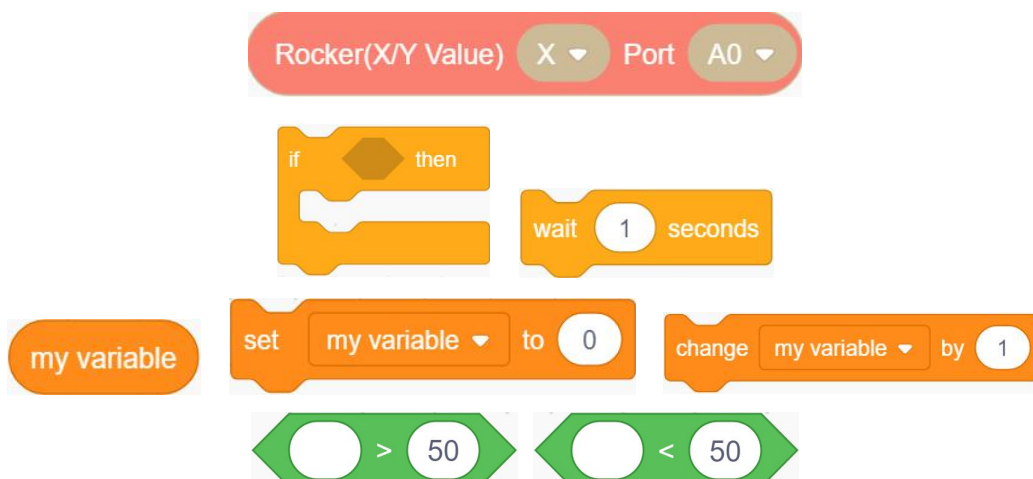
Experimental wiring:



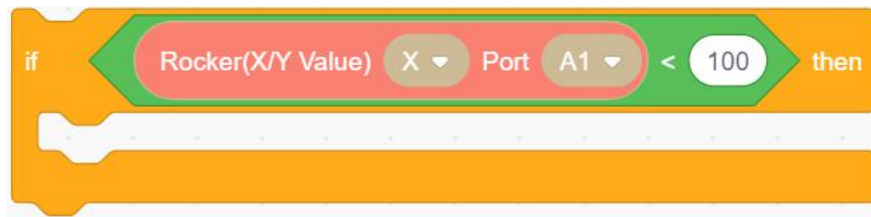
The rocker module is connected to the interface of the sensor expansion board with silk screen (GND, A0, A1, 5V), X: A1, Y: A0.

Experimental steps:

1. Select the following building blocks in the [Plugkit], [Control], [Variable], and [Operation].



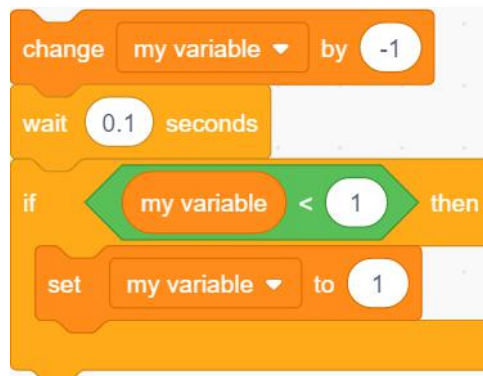
2. Add the rocker module building block to the left of the computing block. The X-axis direction port of the joystick module needs to select A1.



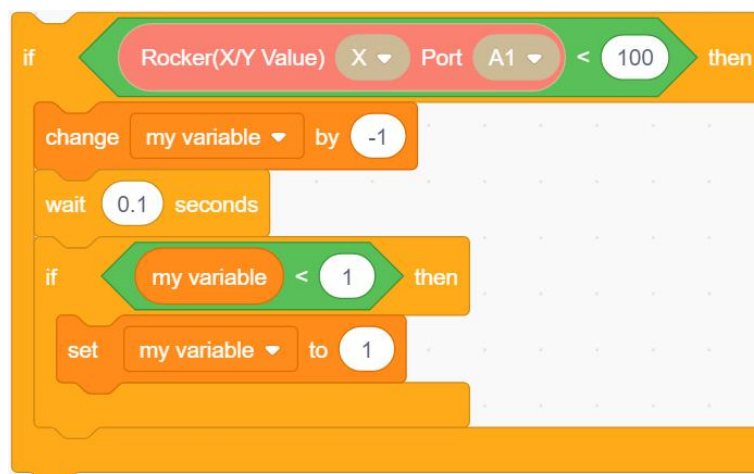
3. If rocker value in X direction <100, reduce wind speed. If rocker value in X direction > 600, increase wind speed.

Only the rocker value control in the X direction is introduced here. If you want to use the Y direction control, the same principle is used. When the X-direction joystick value is <100, increase my variable by -1

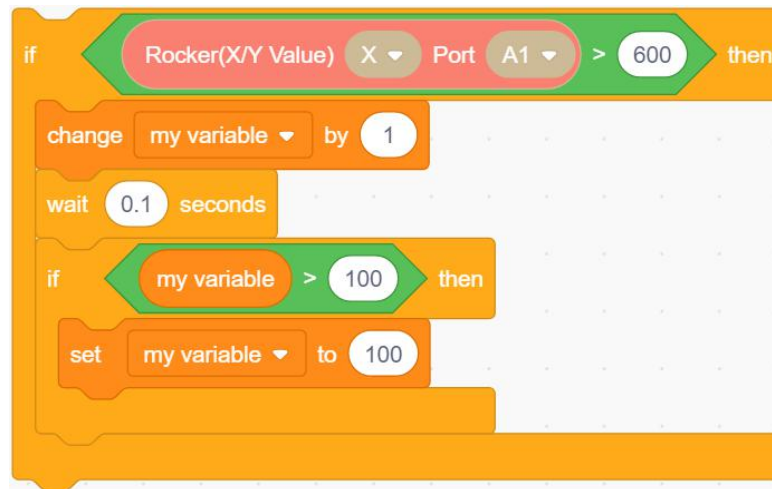
Note: Add a "wait for 1 seconds" building block to delay, otherwise the program will run very fast, which will cause my variables to decrease very quickly. Here we set it to wait for 0.1s and increase by -1 every 0.1. You also need to add a conditional judgment statement to limit the size of my variable to avoid overloading or stalling the motor caused by too high or too small wind speed, then combine these building blocks together.



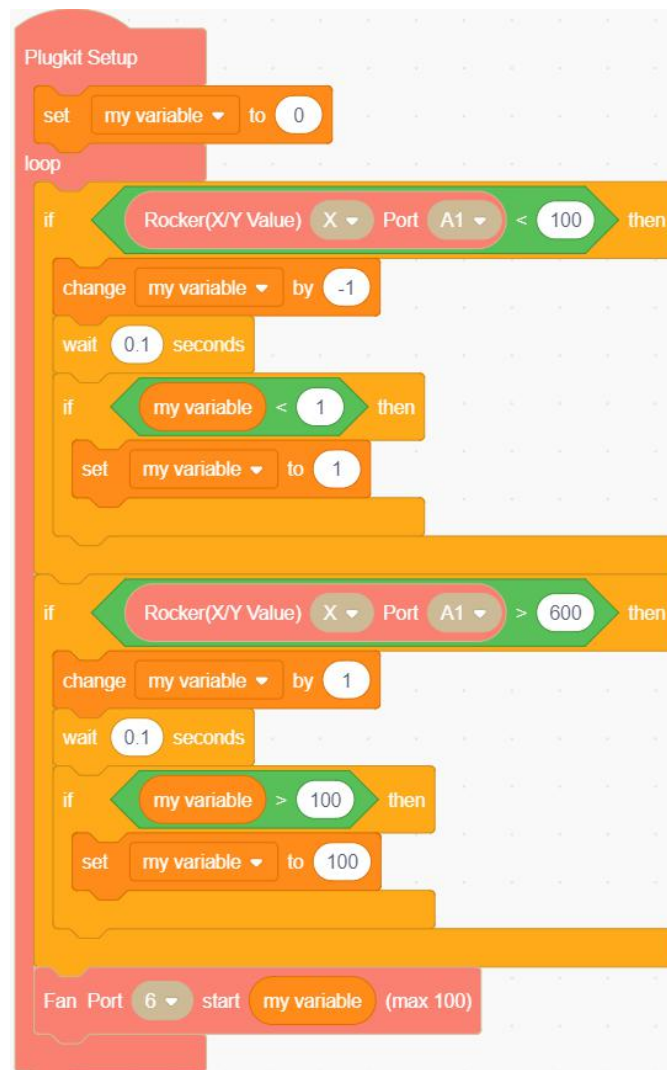
4. If the X analog value of the rocker module <100, execute the assembled blocks in last step.



5. In this case, we have completed the construction of the rocker module X direction rocker value <100 to reduce the wind speed, and the X direction rocker value > 600 to increase the wind speed is similar.



6. Add my variable block to the wind speed input item on the fan block, and then add the two assembled blocks of steps 4 and 5 and the fan block together and put them in the loop block. Put set my variable 30 block into the setup initialization.



7. Compiling and uploading programs.

Experimental phenomena: The initial value of the wind speed is 30. When the rocker is shaken to the left limit($X < 100$), decreases the fan wind speed by 1 every 0.1s. When the wind speed is less than 1, the minimum wind speed is 1. When the rocker is shaken to the right limit ($X > 600$) , increase the fan speed by 1 every 0.1s. When the wind speed is greater than 100, the maximum wind speed is limited to 100.

