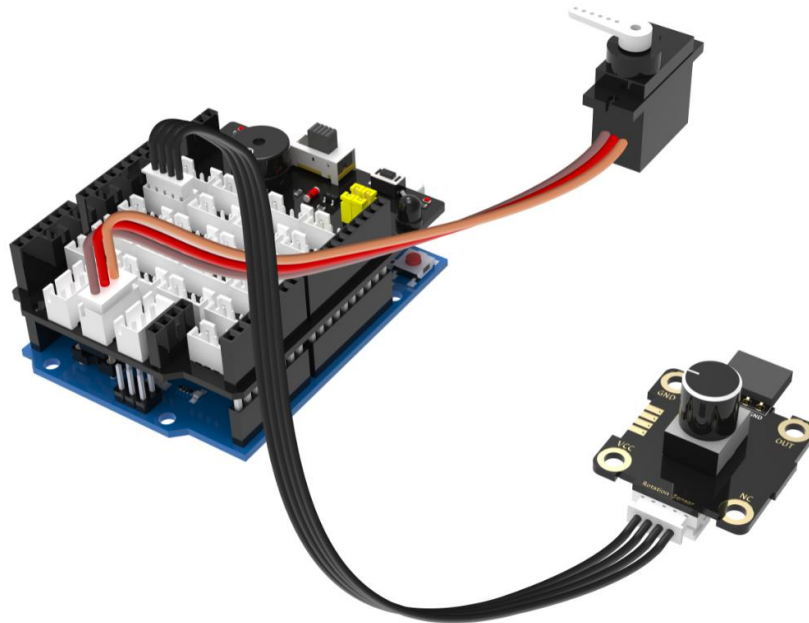


Experimental content: Adjust the rotation angle of the servo through the potentiometer (0 ~ 180 °)

Experiment preparation: UNO board *1, Plugkit sensor expansion board *1, USB data cable *1, 9G Metal digital servo *1, Potentiometer module *1

Experimental wiring:

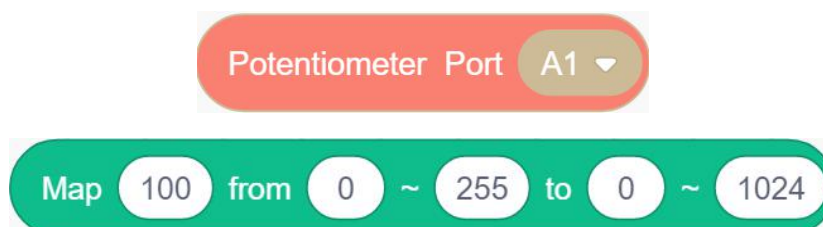


The potentiometer module is connected to the connector of the sensor expansion board (GND, A0, A1, 5V), OUT pin of module connect A1 pin of expansion board.

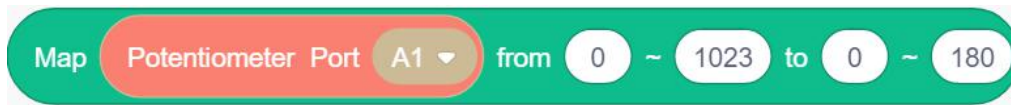
Experimental steps:

This experiment is similar to the potentiometer controlling the brightness of RGB lights or the fan speed.

1. Select the following blocks in the [Plugkit] and [arduino].



2. Since the rotation angle of the servo is only 0 ~ 180 degrees, we need to map the value of the read-out potentiometer module from 0 ~ 1023 to 0 ~ 180.



3. Set the servo port to 5 and put the combination of the blocks in the previous step to the position of the angle input of the blocks of the servo, and put the combined blocks into the loop.



4. Compiling and uploading programs.

Experimental phenomena: By adjusting the analog value of the potentiometer to adjust the rotation angle of the servo, the potentiometer rotates the servo clockwise from 180 ° to 0 °, and rotates the servo counterclockwise from 0 ° to 180 °.

