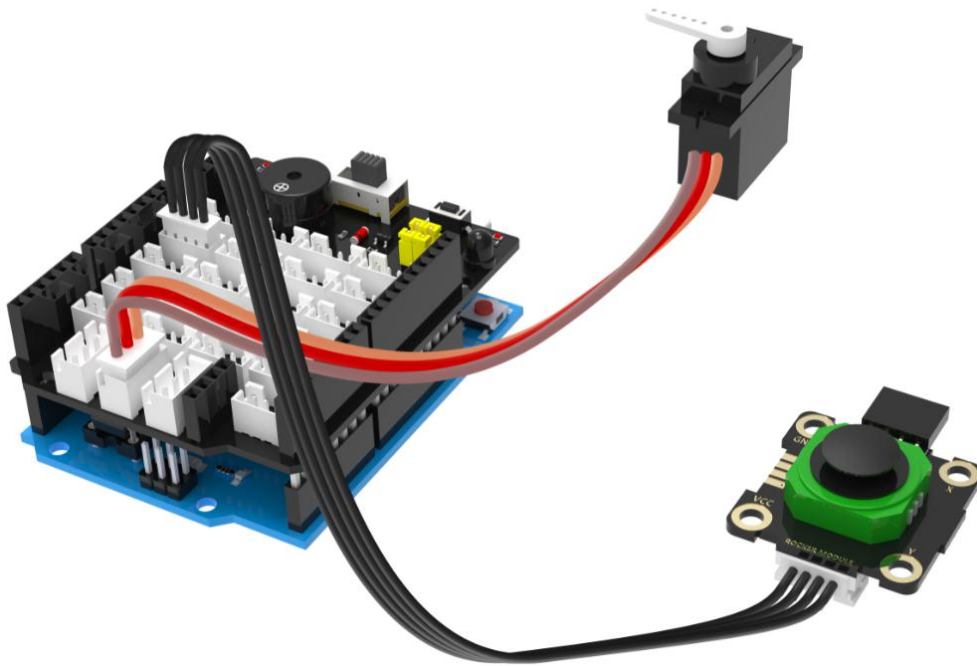**Experimental content:** Switch the servo angle by the direction of the X axis of the rocker. The default is 90 °. The left of the X axis is 0 °, and the right of the X axis is 180 °.

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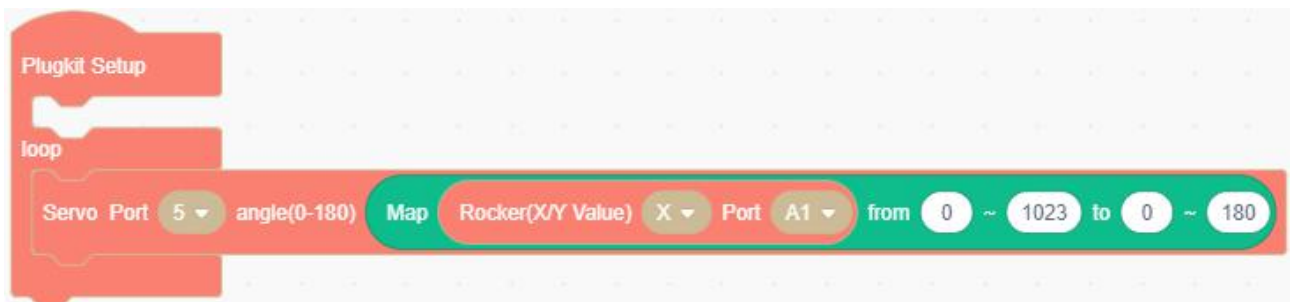
Experimental wiring:

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

Experimental steps:

1. The rocker switch the servo angle is similar to the experiment in the previous section. You only need to replace the potentiometer module with the rocker module.

Note: If it is the X direction of the rocker, the port needs to be modified to A1. If it is in the Y direction of the rocker, the port needs to be modified to A0.

2. Compiling and uploading programs.

Experimental phenomena: Since the default median value of the rocker module in the X

direction is around 500, the initial servo angle is 90 degrees. If the rocker is shaken to the left limit, the rocker value is 0, that is, the servo angle is also 0. If the rocker is shaken to the right limit, the rocker value is 1023, that is, the servo angle is also 180.