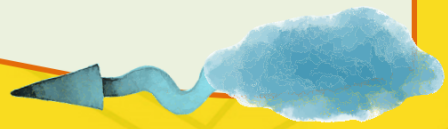
Precision Walking

Target

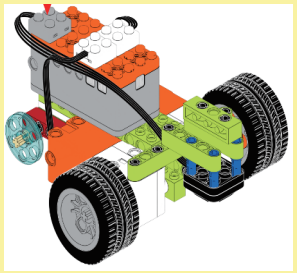
- Learn distance walking and angle walking.
- Understand the speed control.
- Complete precise walking control of the robot moving forward and backward.

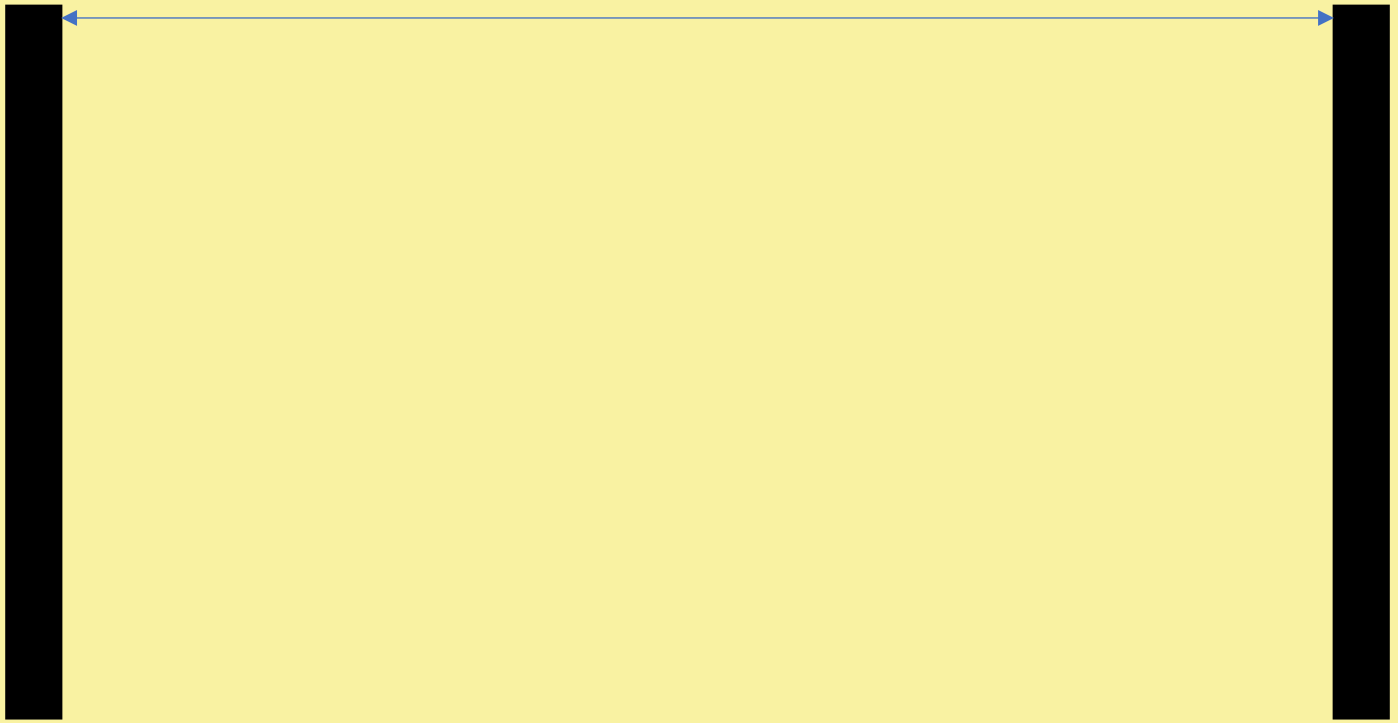
01 Task



Task

Task 1: Make the car move forward and backward

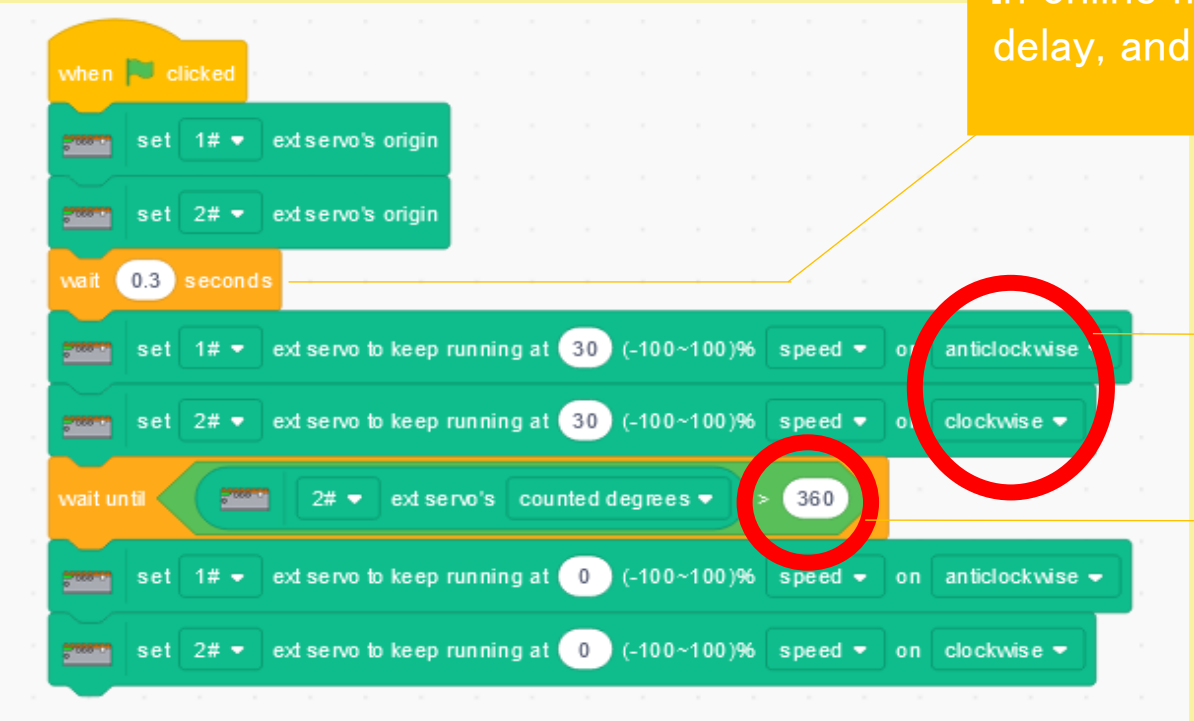




Task

Task 1: Make the car move forward

Relative angle control via a motor



In online mode, there is a certain delay, and you need to wait for a little while.

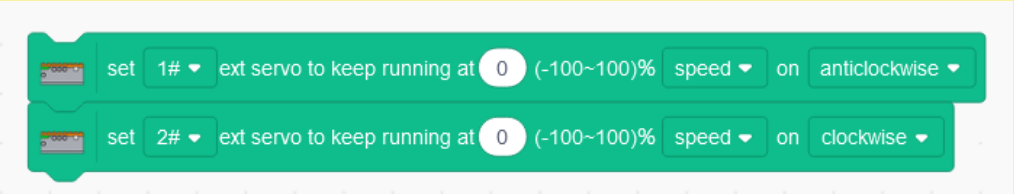
Should the motor move clockwise or counterclockwise for moving forward?

How many degrees do we need to use to move forward by 1 meter? Let's try it a few times.

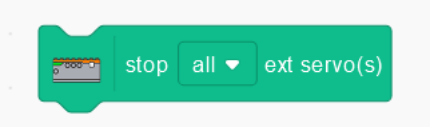
Coding Technique 1

There are two ways to stop the motor.

Method 1: Set the power to 0.



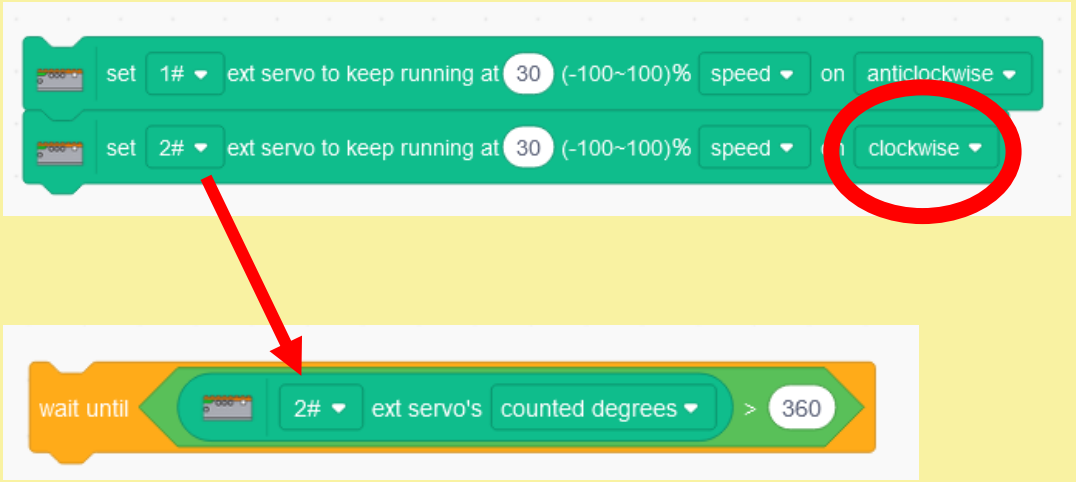
Method 1: Stop the motor.



Coding Technique 2

The selections of waiting for the motor

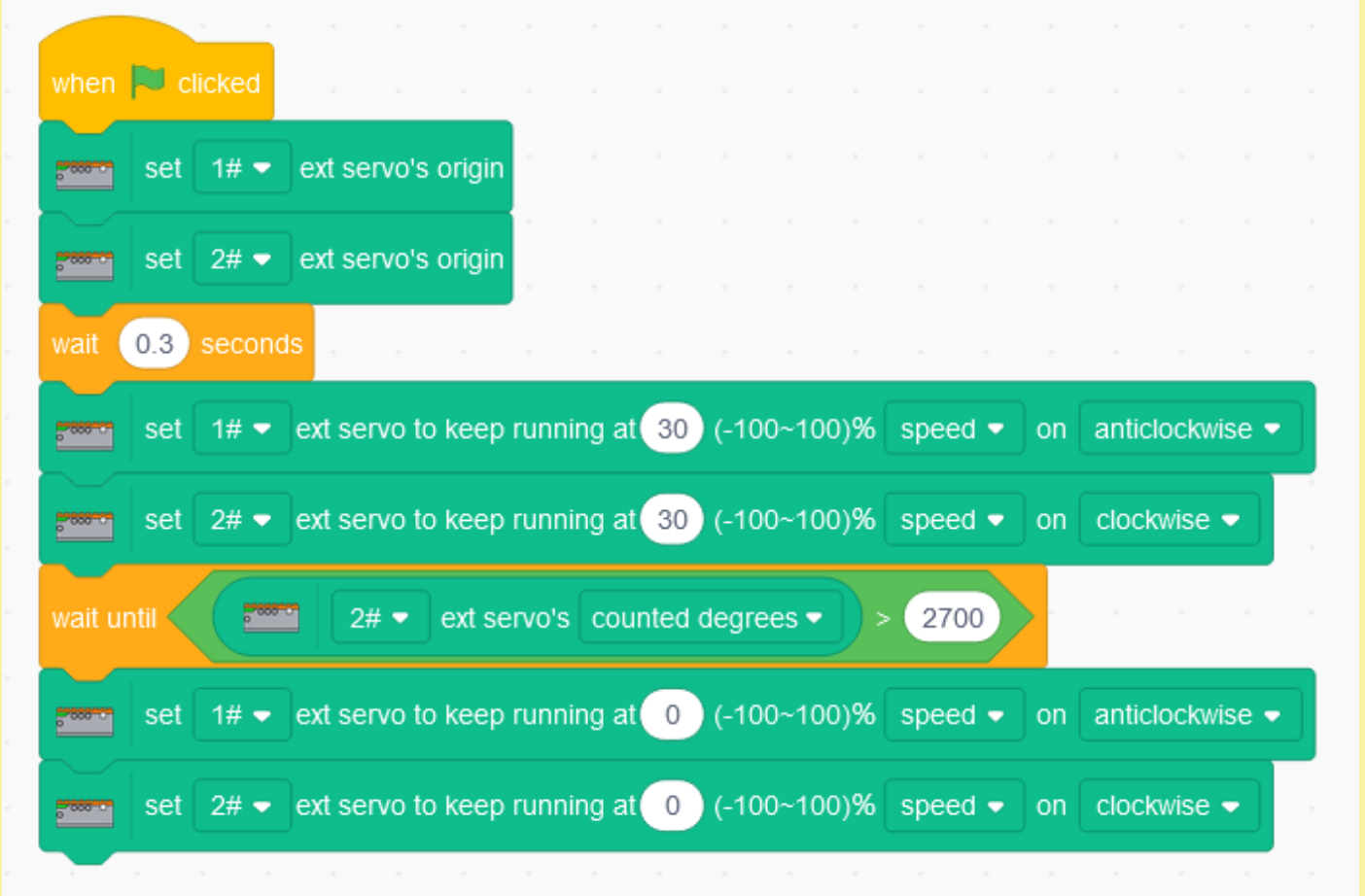
When using  "greater-than" comparison, please choose the motor rotating clockwise for the evaluation.



Task

Task 1: Make the car move forward.

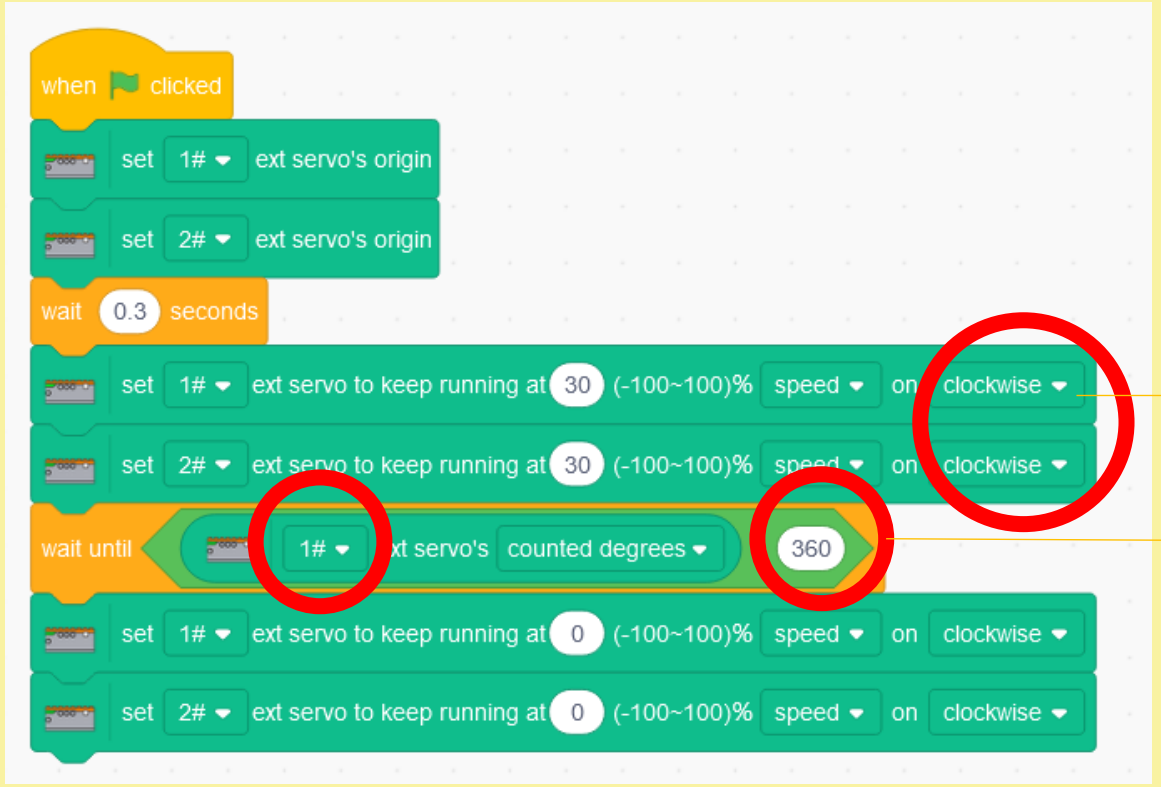
Referrable program



Task

Task 2: Make the car move backward the same distance.

Control through "counted degrees" /" relative angle"



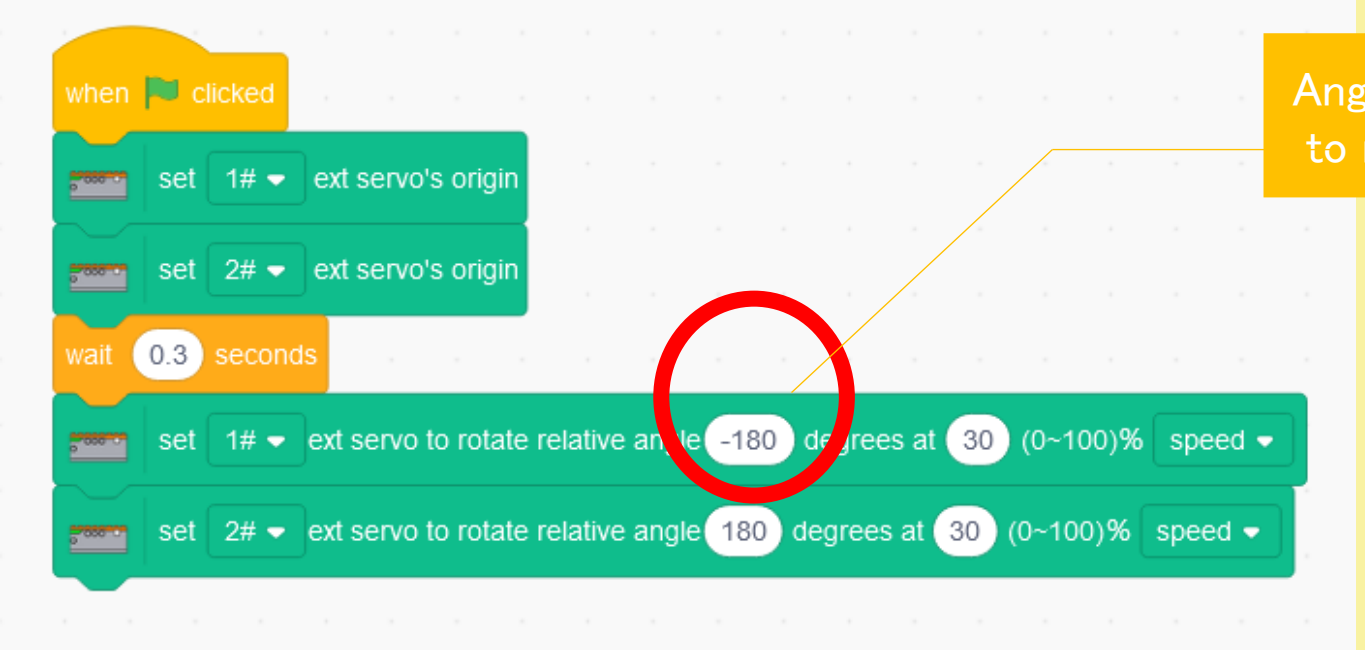
Should the motor move clockwise or counterclockwise when the car moves backward?

How many degrees do we need to use to move backward by 1 meter? Let's try it a few times.

Task

Task 3: Second method for moving the car forward and backward

Control the movement by counted degrees to move 0.5 meters.



Coding Technique 3

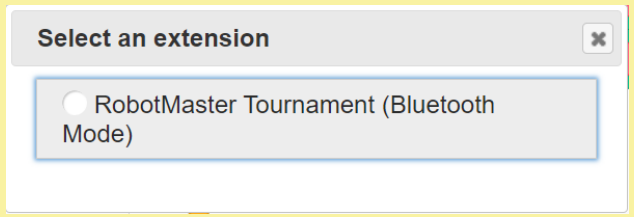
Program download and reconnection operation

1、Green flag: Run the program online
2、Red stop: Stop the online operation
3、Upload the program to the robot and run it

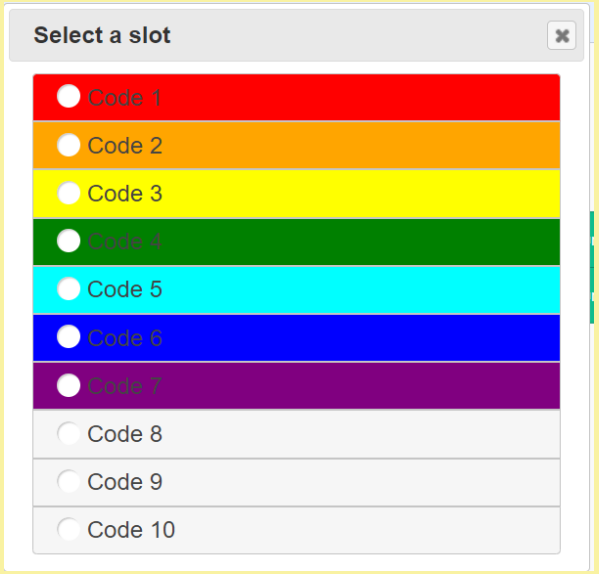
Next, after selecting a movement program, we will begin uploading and running it.
Downloading and running can eliminate the delay in motor startup that occurs during online operation.

Coding Technique 3

Program download and reconnection operation



Select an extension



Choose the program color

Automatically run after successful download.

Coding Technique 3

Program download and reconnection operation

Press the power button on the controller twice to complete the shutdown and power-up process. Then reconnect in the software.