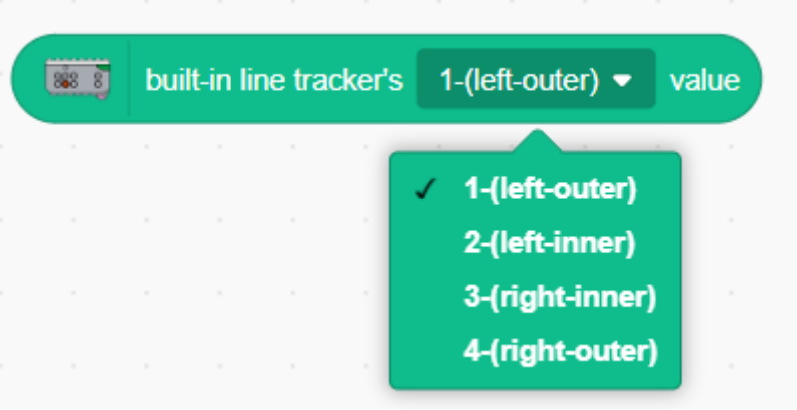
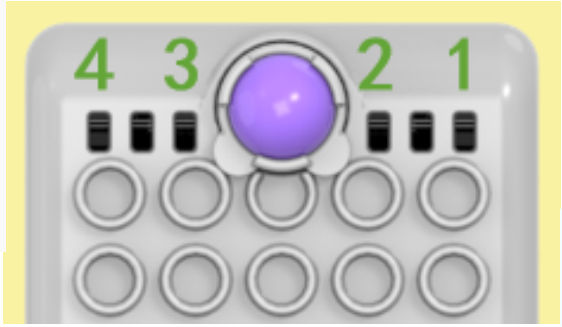
Review

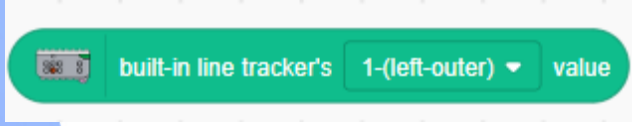
1.Module Explanation



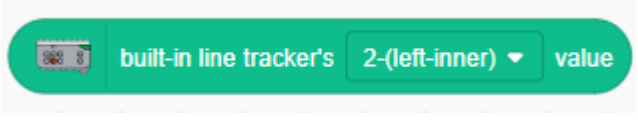
The corresponding sensor values can be read.



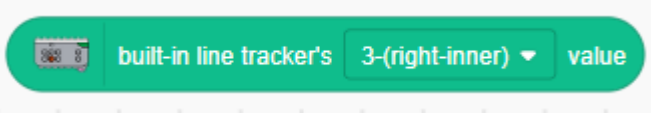
超霸mini巡线: 27*21*27*33



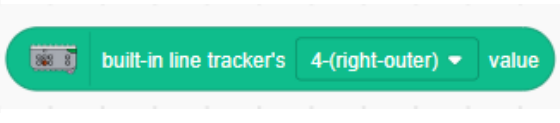
27



21



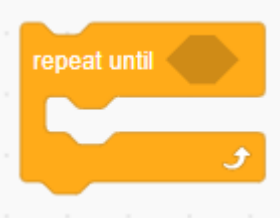
26



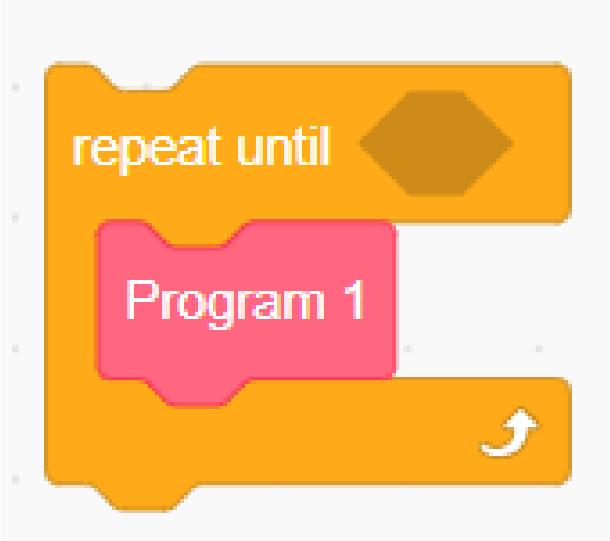
33

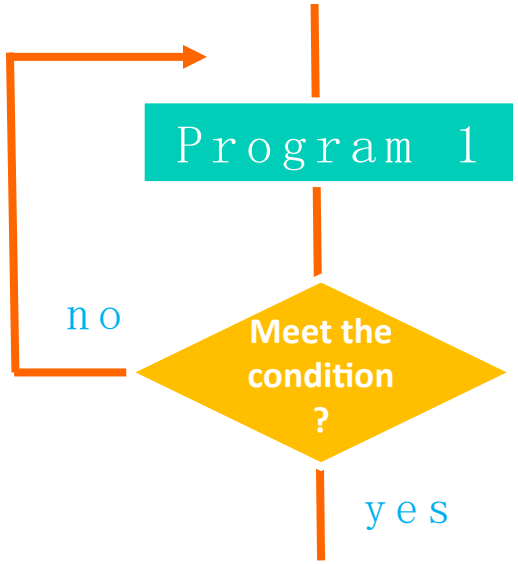
Review

2. Conditional loop



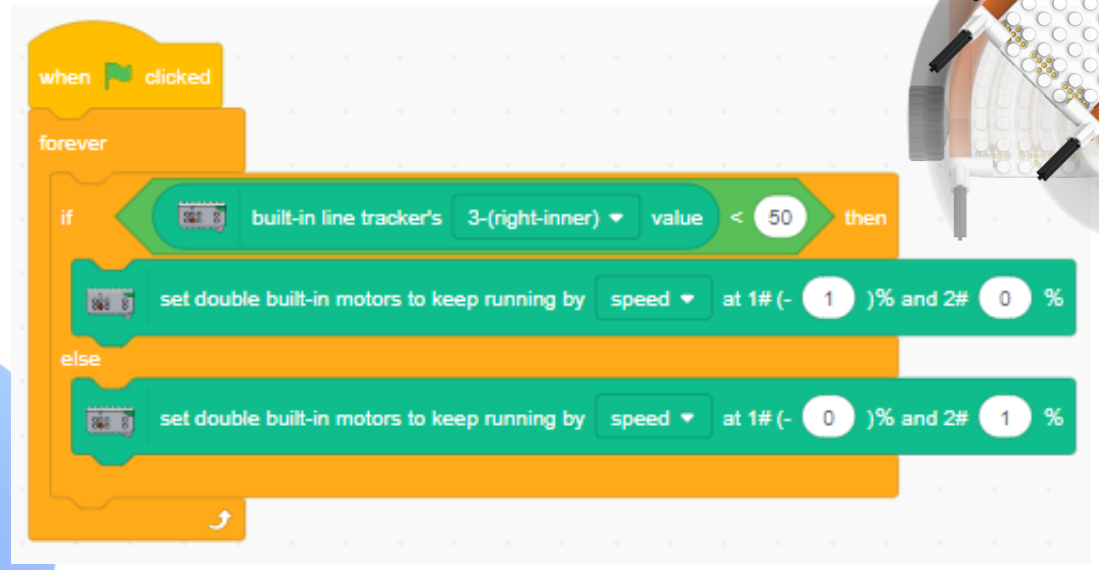
The robot can repeatedly execute the program and stop the loop when the condition is met.

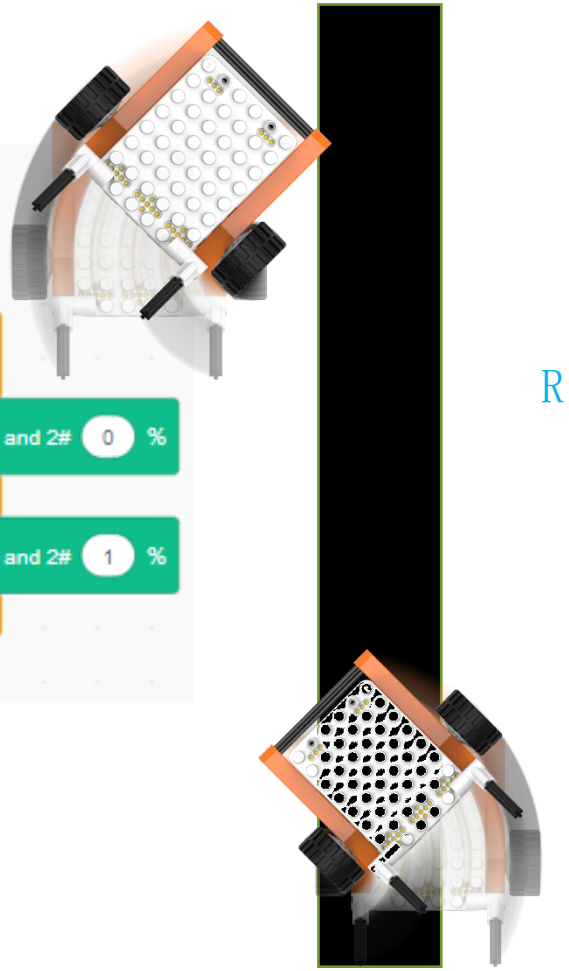




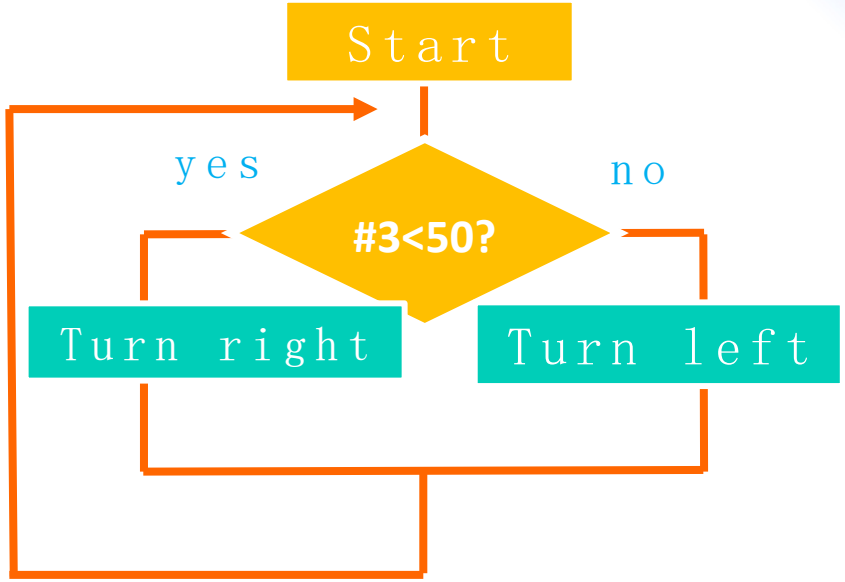
Review

3. Routing principle





Repeat



Please use your own kit.

Do not put any parts in your mouth.

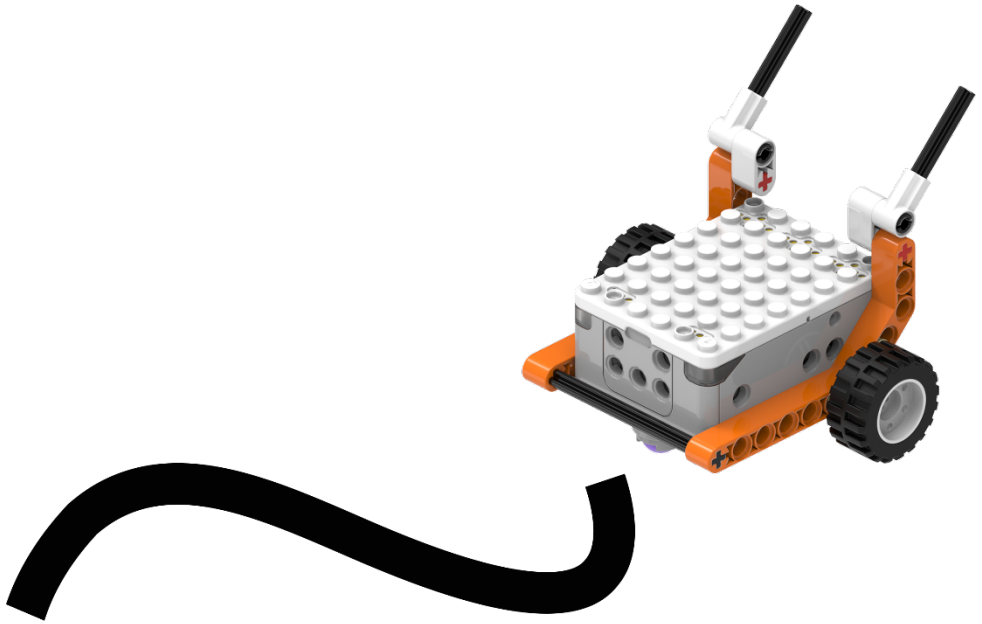
Please clean up after use.

Please raise your hand if you have any questions.

INTRODUCTION

Scenarios

In the previous lesson, we had the car follow the black line and stop automatically. In this lesson, we will have the car patrol along a designated route.



Dear kids:

What type of U-turn is used during the car's patrol?

What can be used to simplify the program?

Let's embark on our journey of exploration together with the "Patrol Car"!

暗物智能
DARKMATTER AI

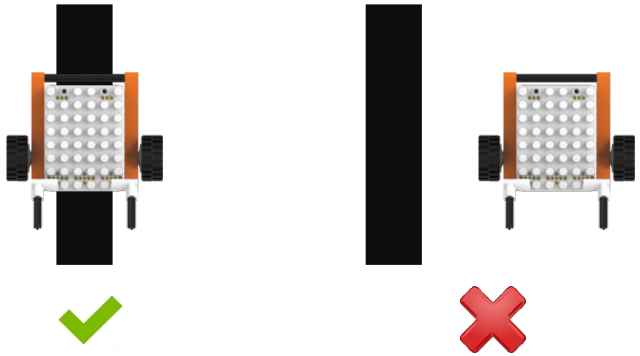
Patrol Car

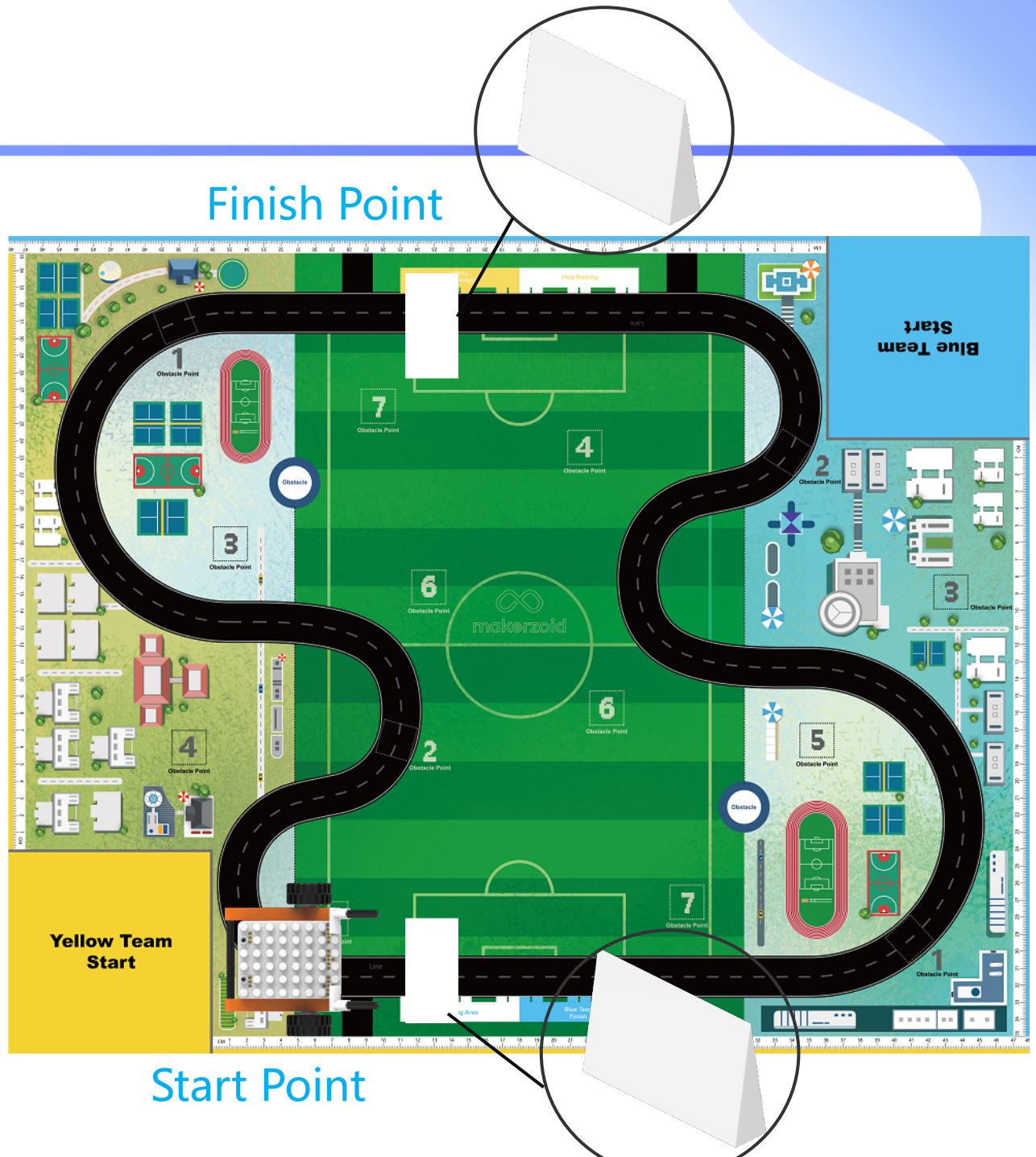
AI Courses

Scenarios

Competition rules:

1. The contestant's car starts from the starting point and automatically follows the black line to the finish line.
2. The car must not leave the black line.
3. Let's see whose car completes the most patrols in 2 minutes.





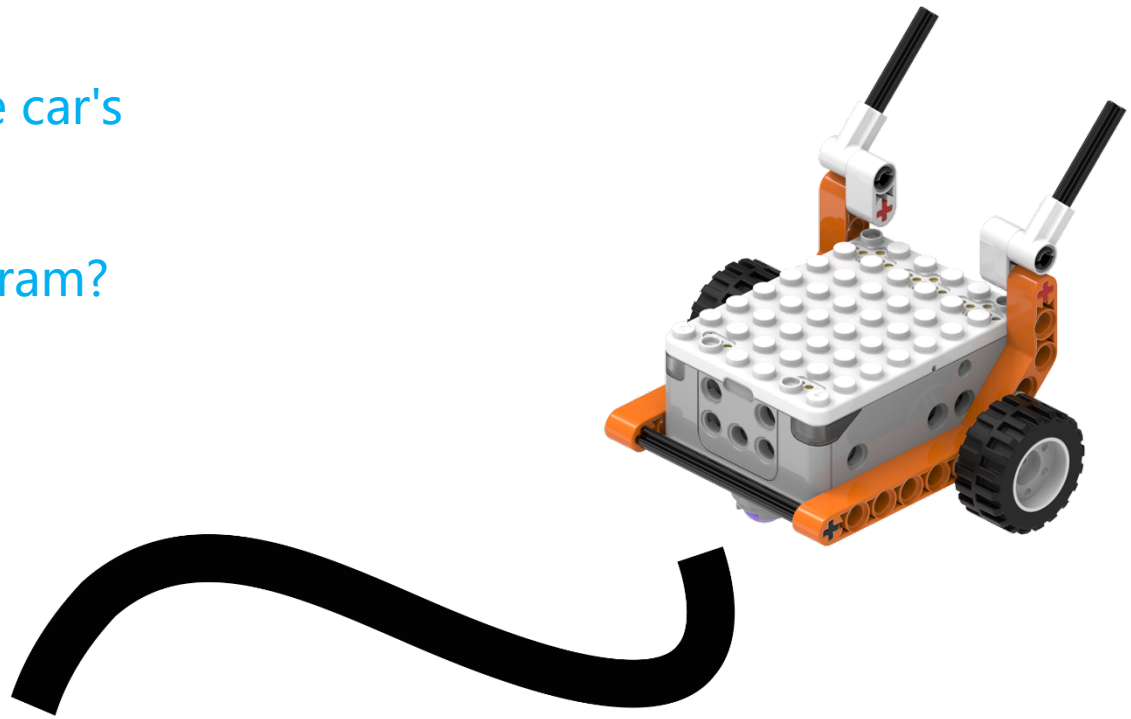
Scenarios

Question ：

Kids, do you know:

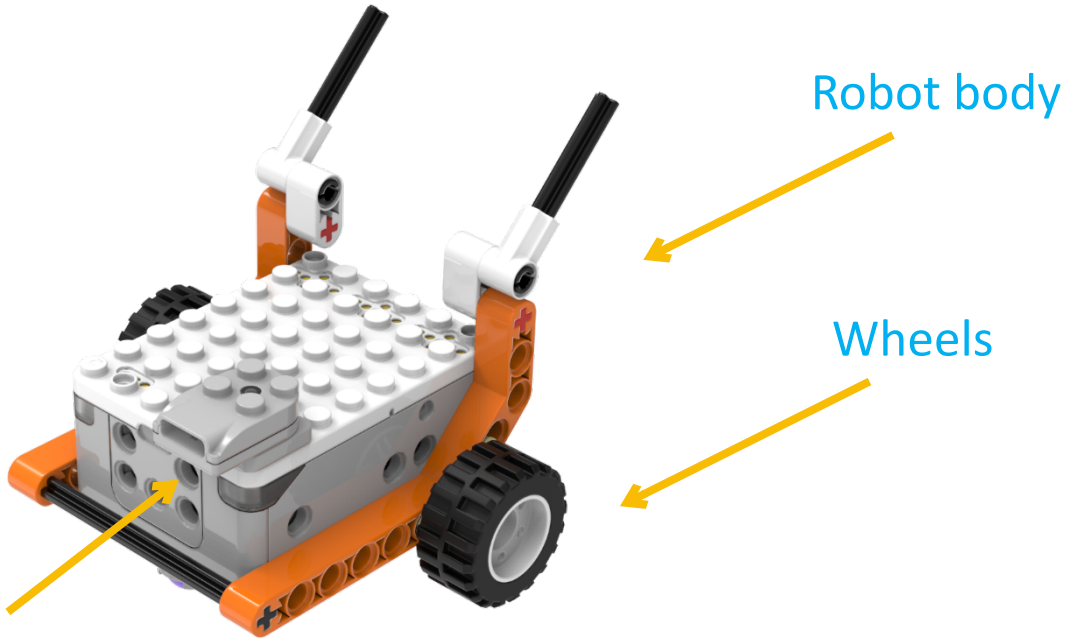
1. What type of U-turn is used during the car's patrol?

2. What can be used to simplify the program?



Scenarios

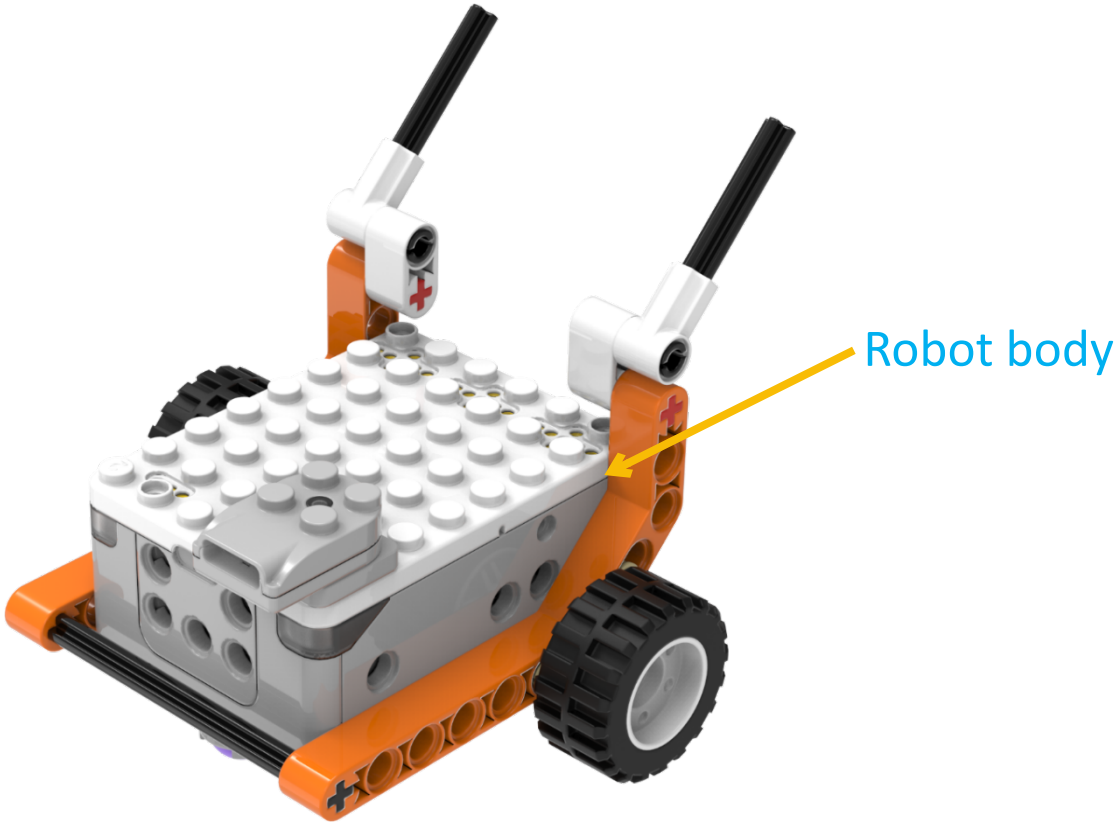
Today, everyone is a junior engineer. Let's work together to complete the gesture control course!



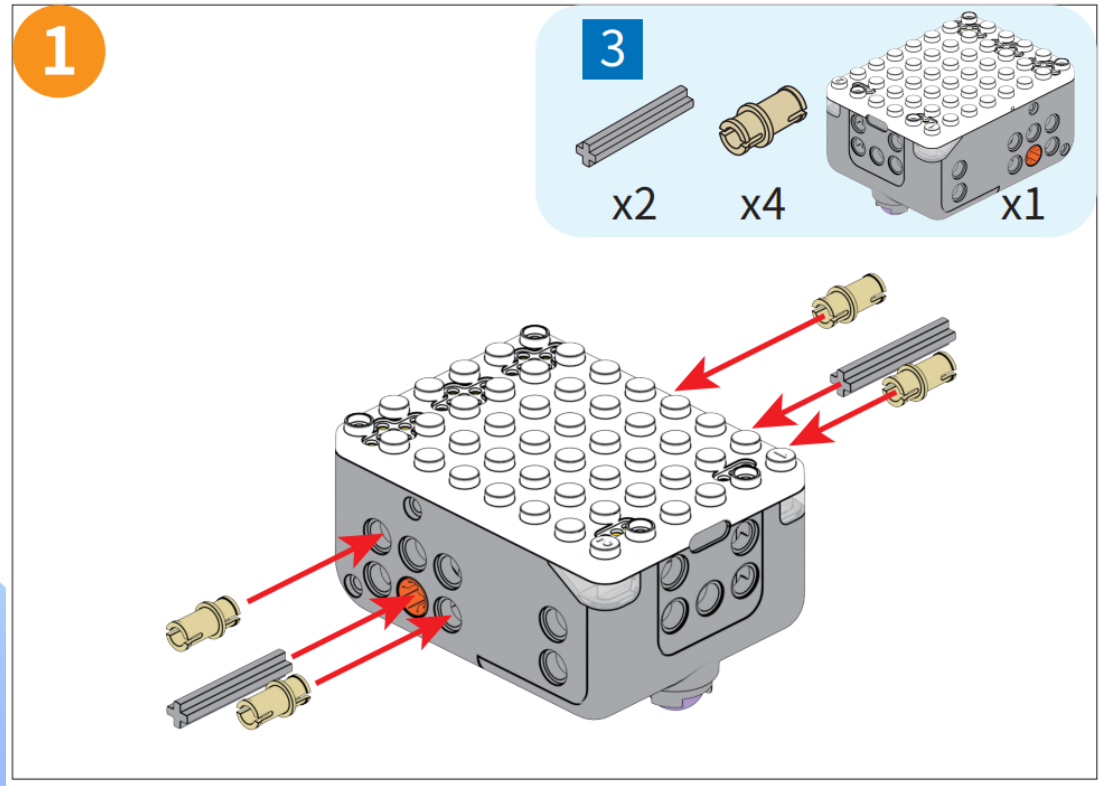
ASSEMBLY

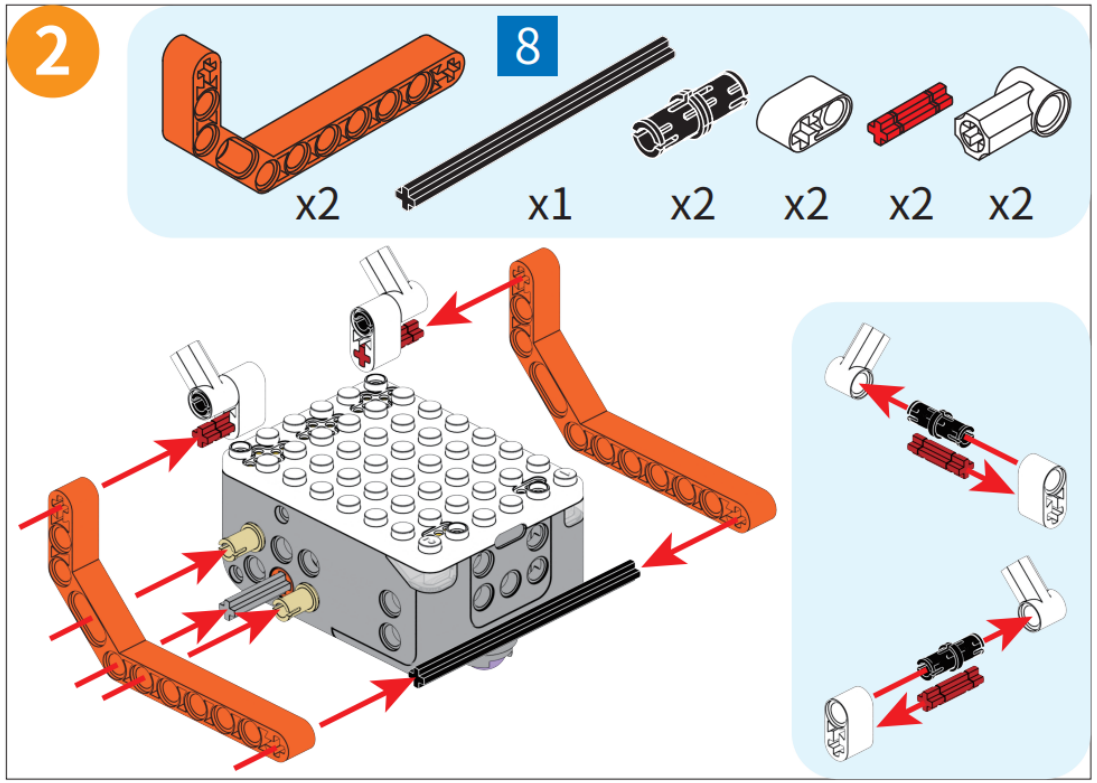
The Final Model

Confrontation components and robot body assembly



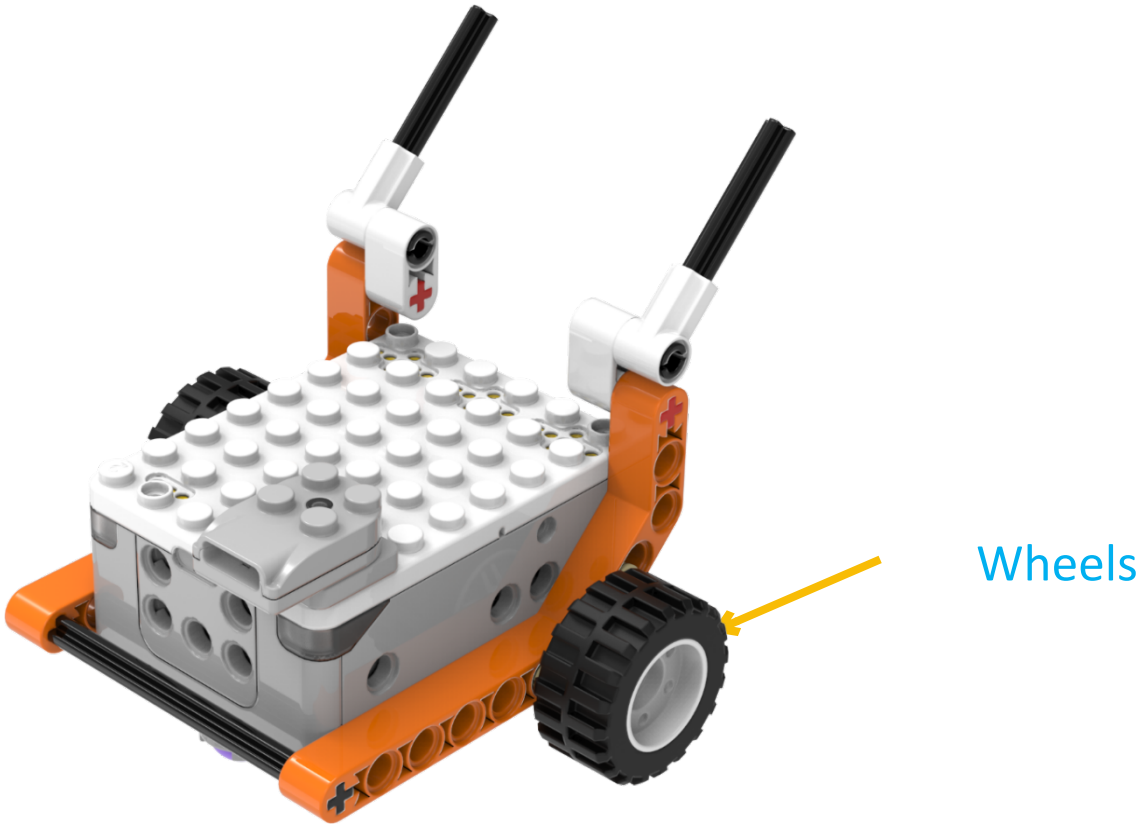
Assembly



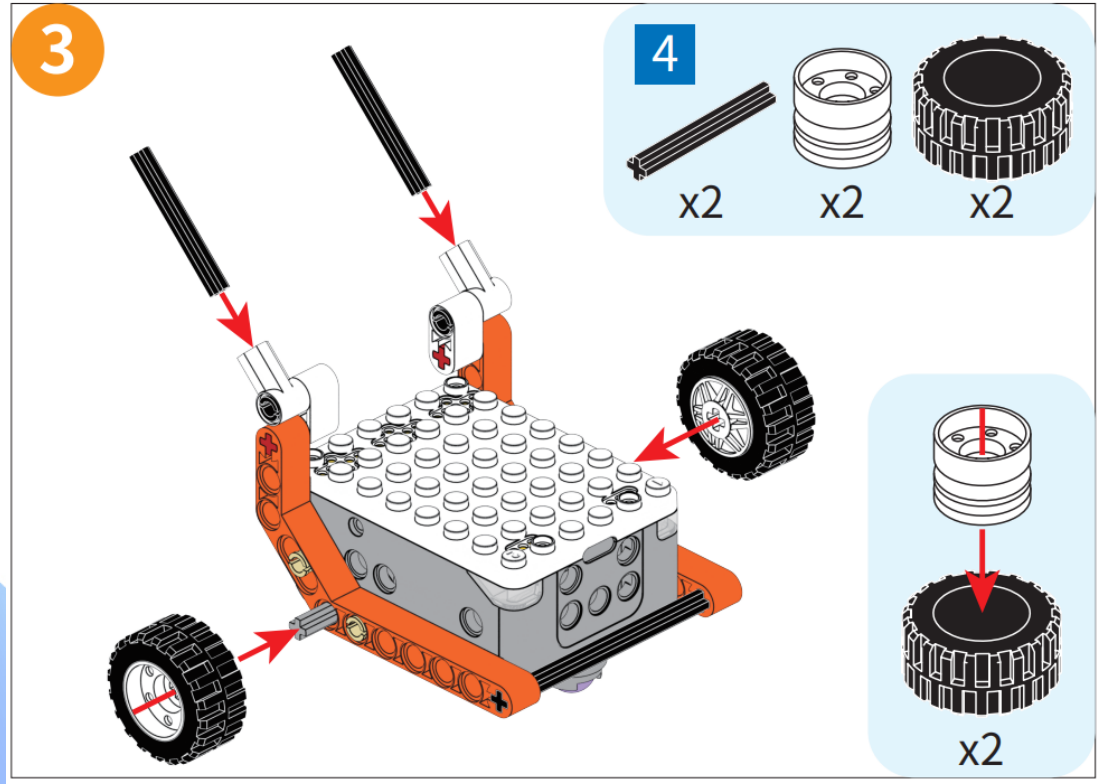


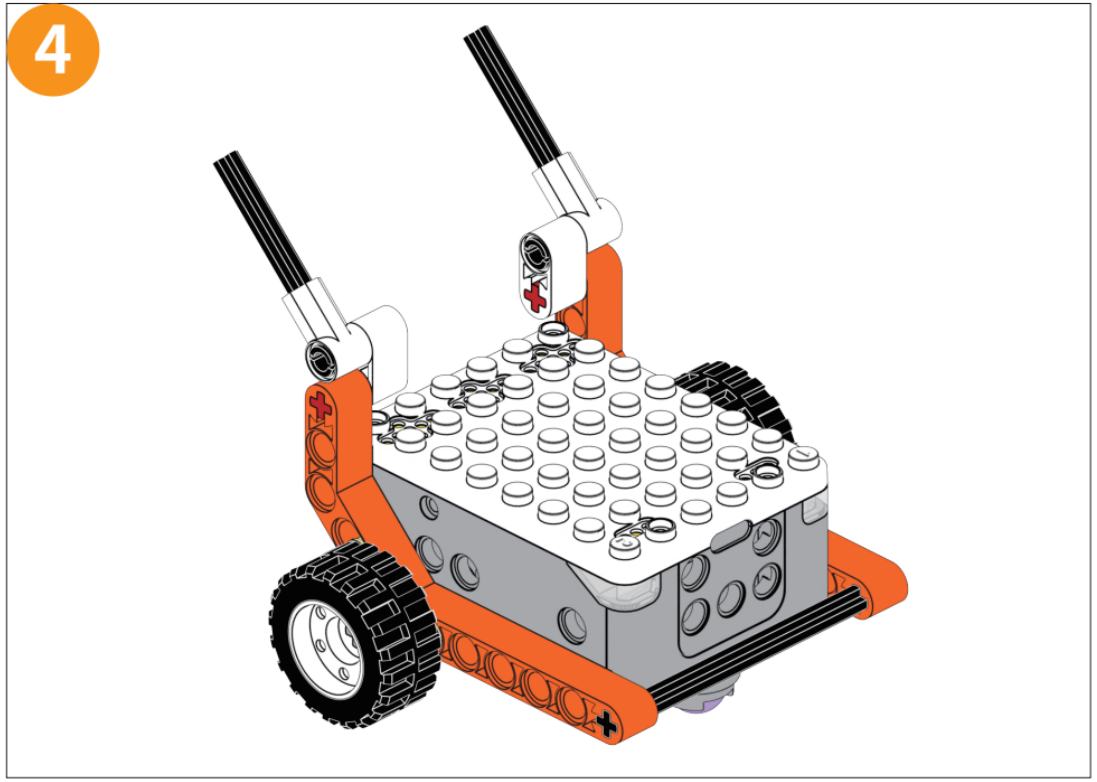
Assembly

Wheels assembly



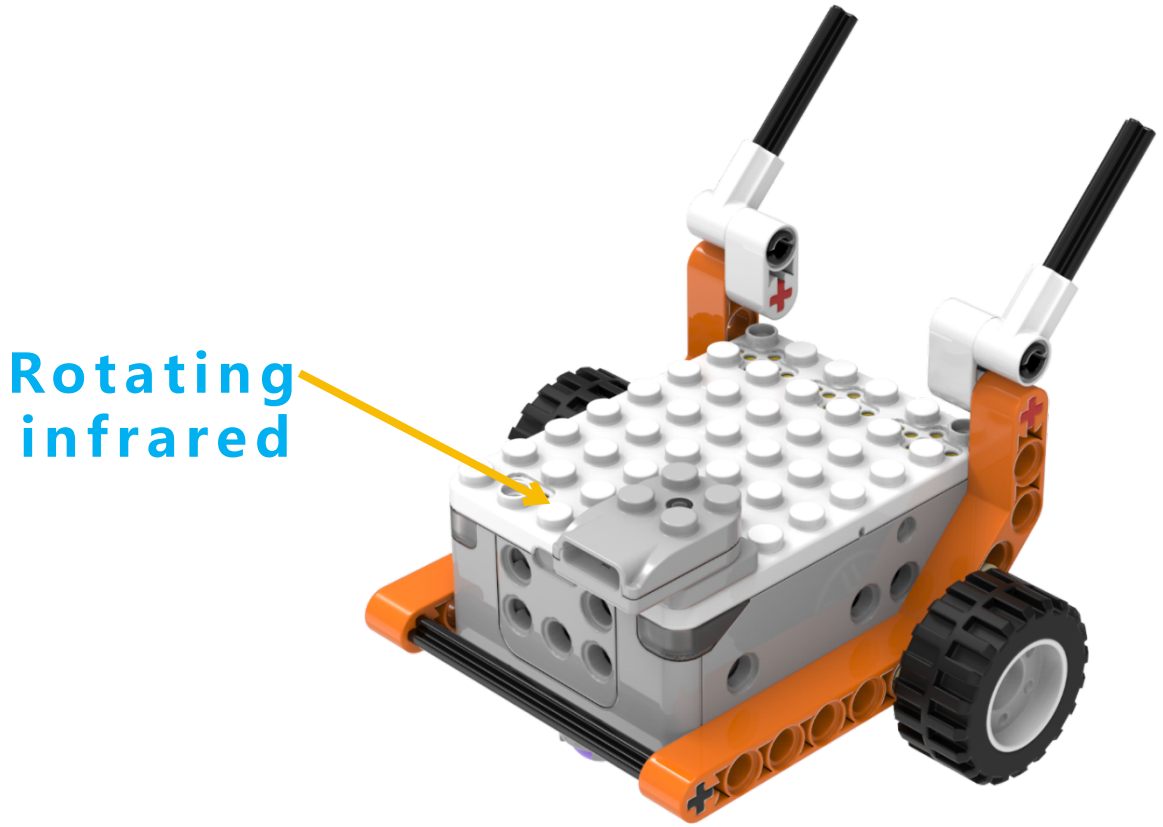
Assembly



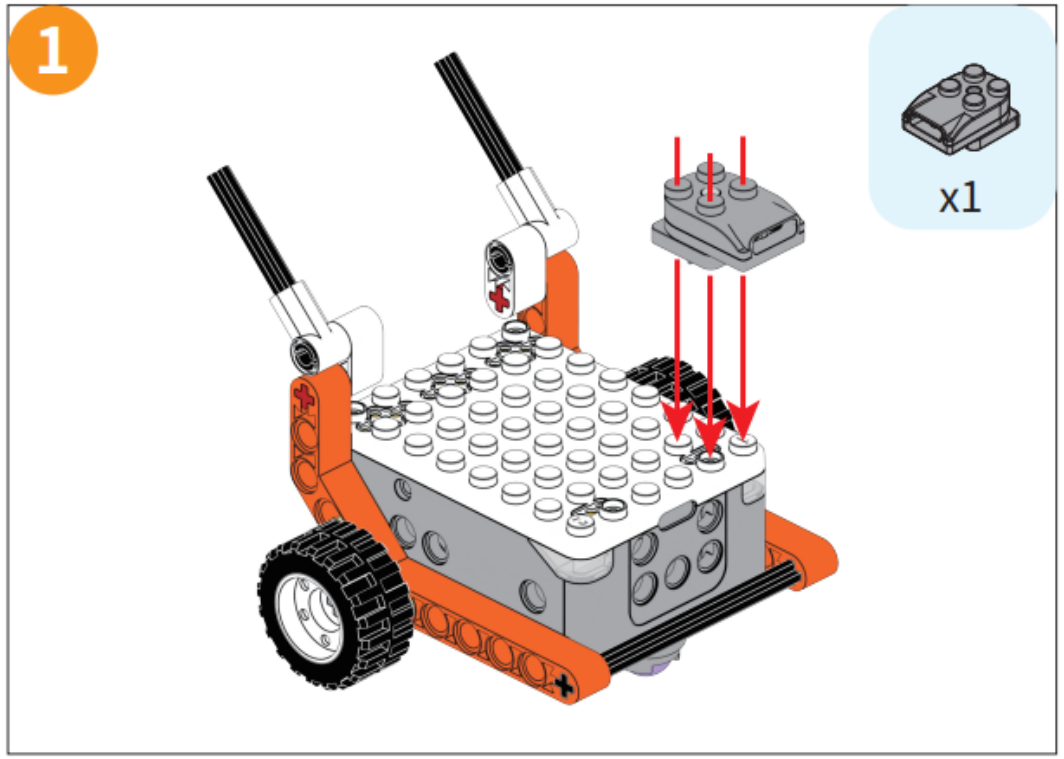


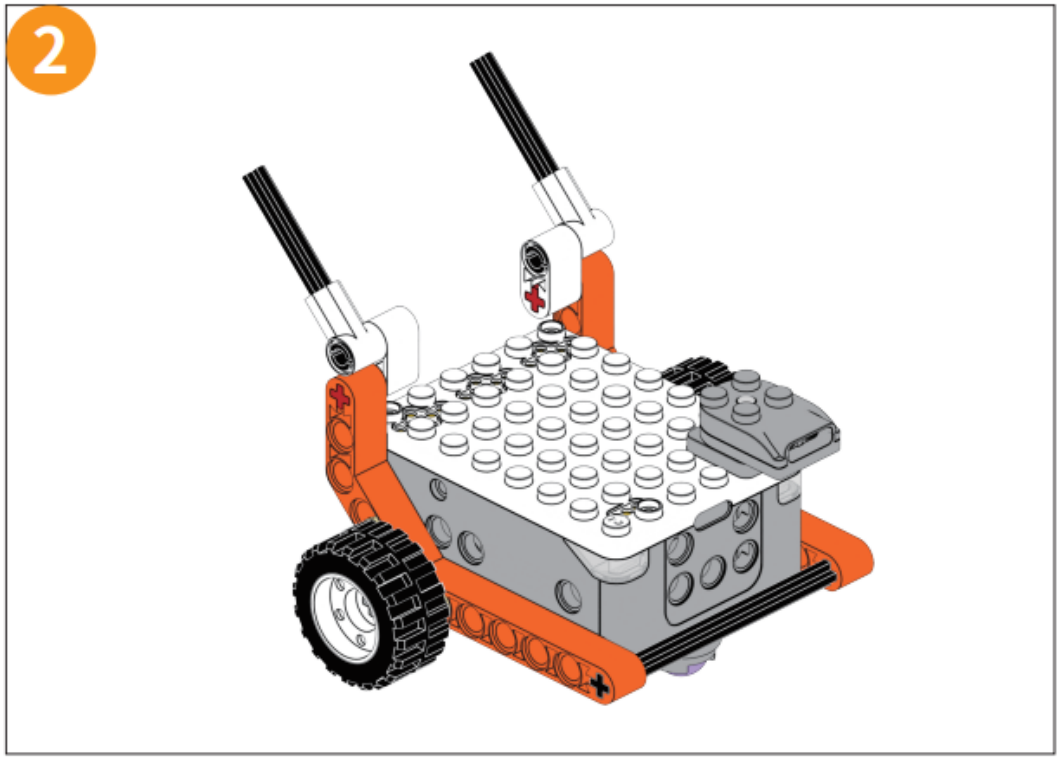
Assembly

Rotating infrared sensor assembly



Assembly





PROGRAMMING

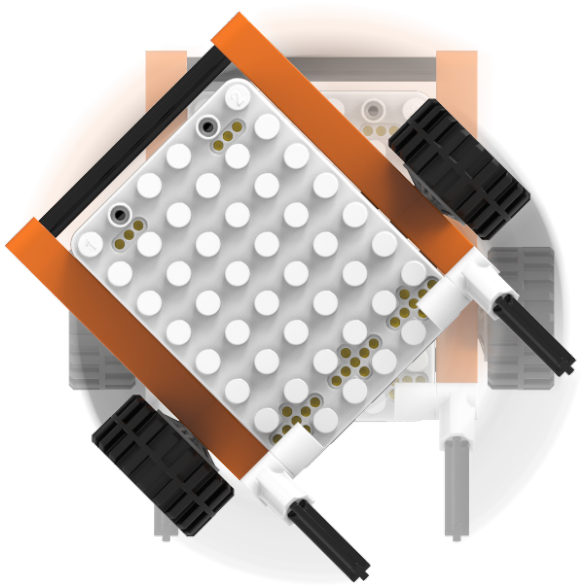
Introductions

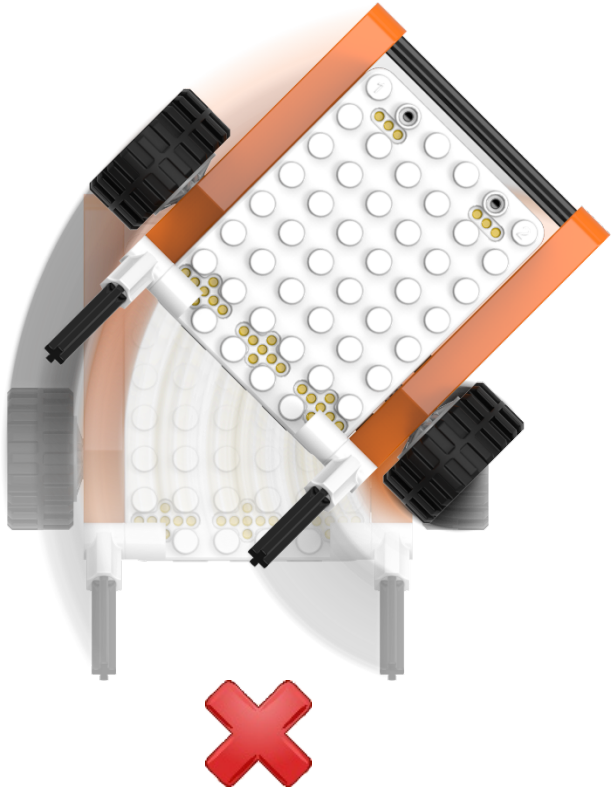
Module Explanation

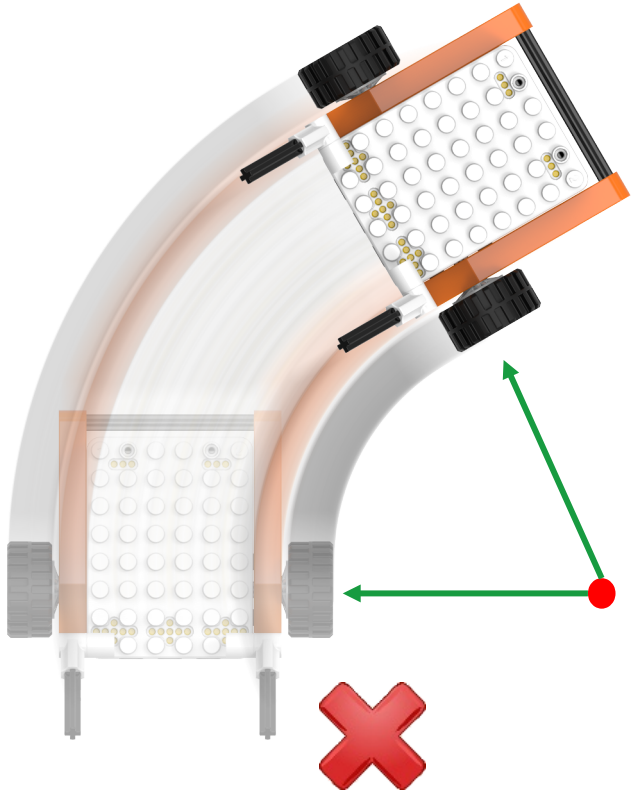
Introductions

Module Explanation

掉头时要选择合理的转弯方式。

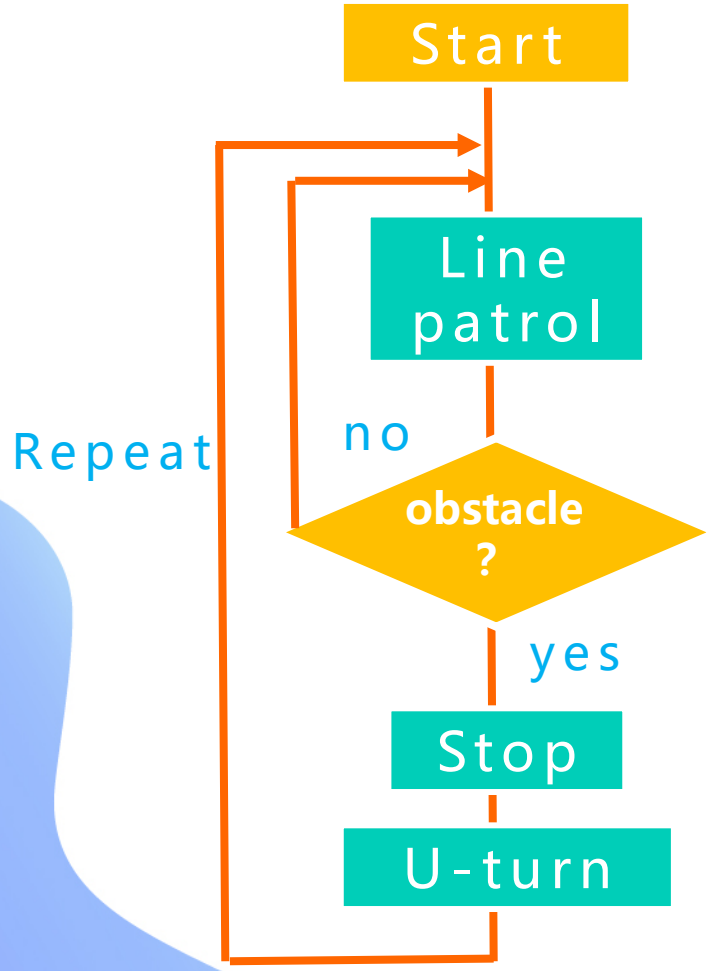




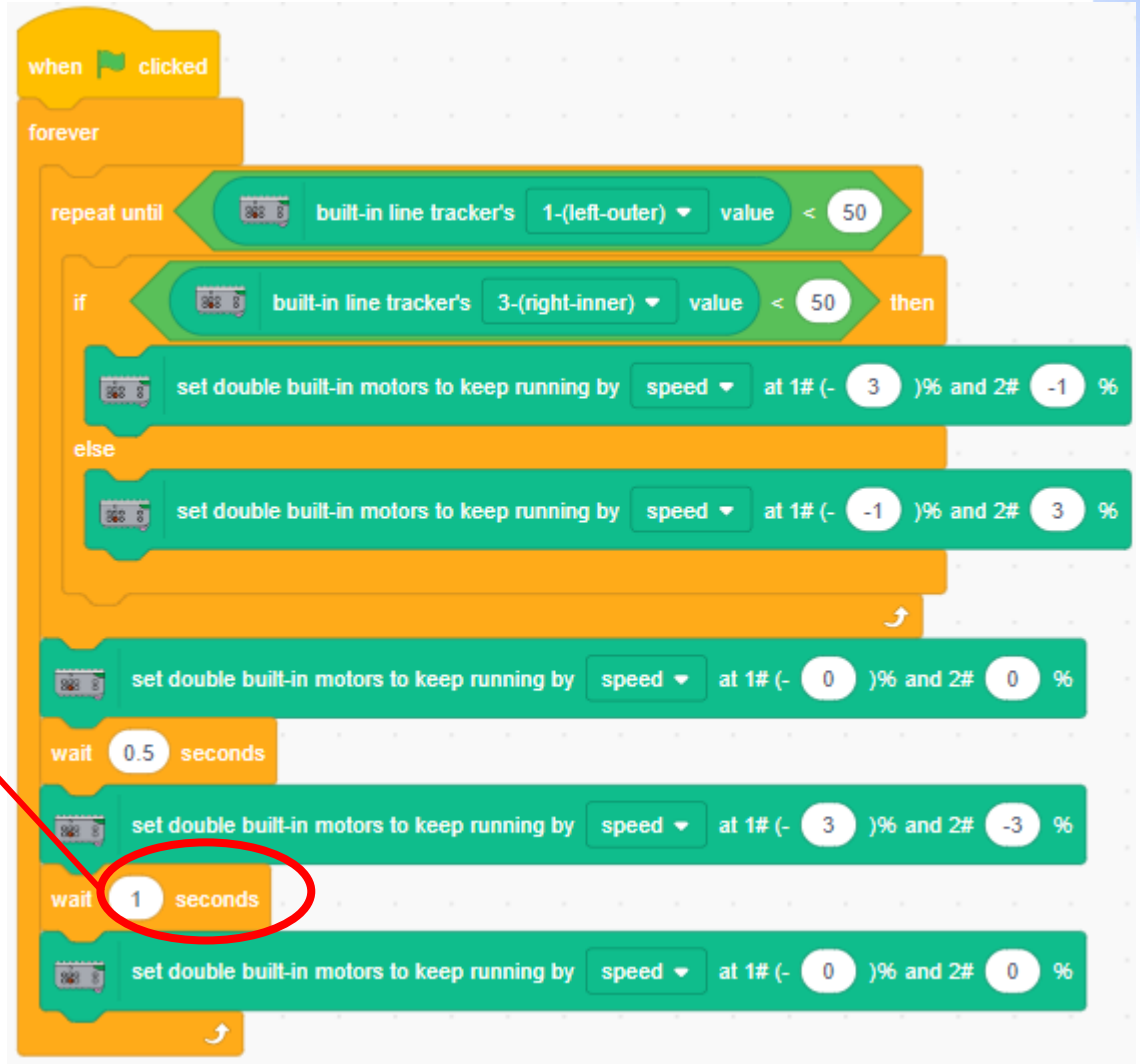


Introductions

Program Explanation



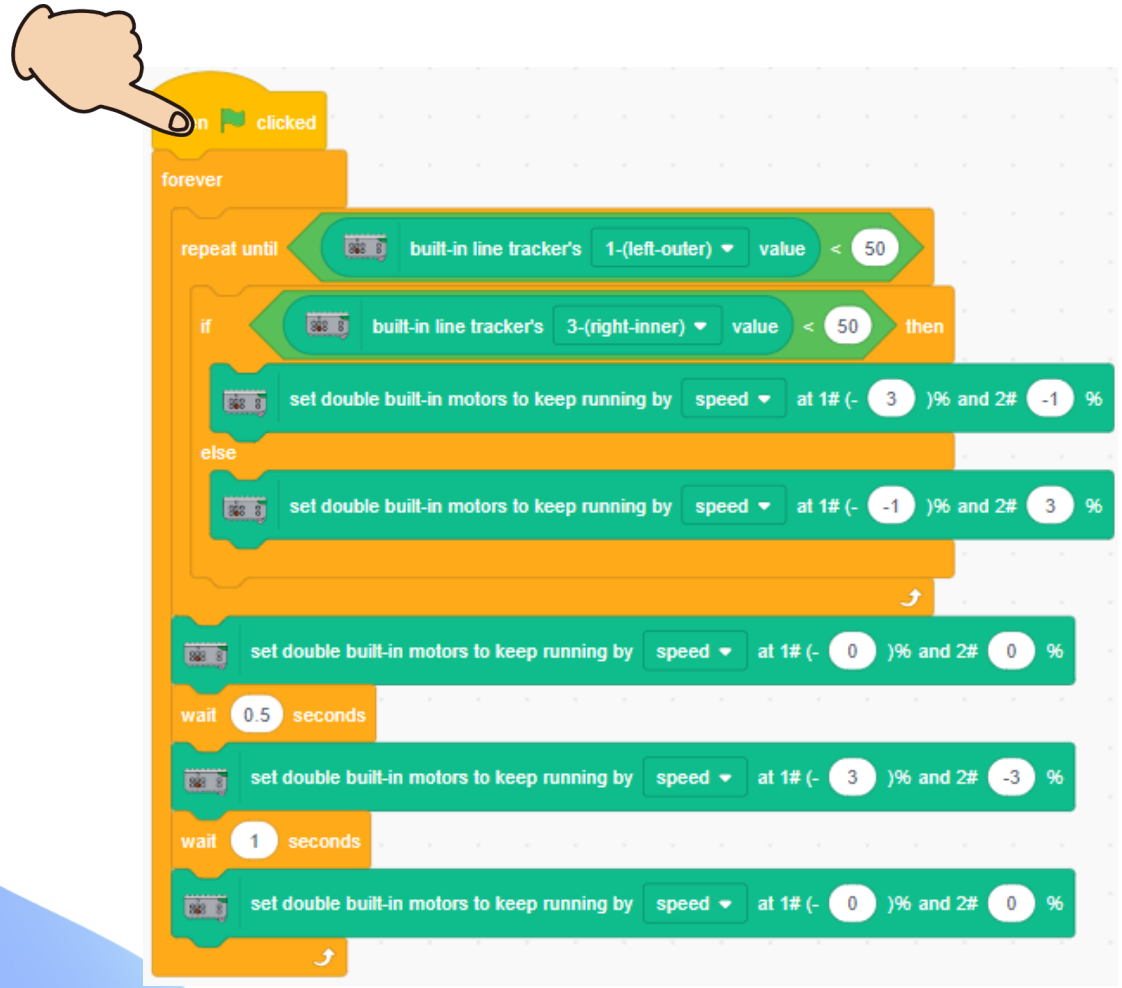
Adjust the time to allow the robot to turn around



Play and Try

Let's play:

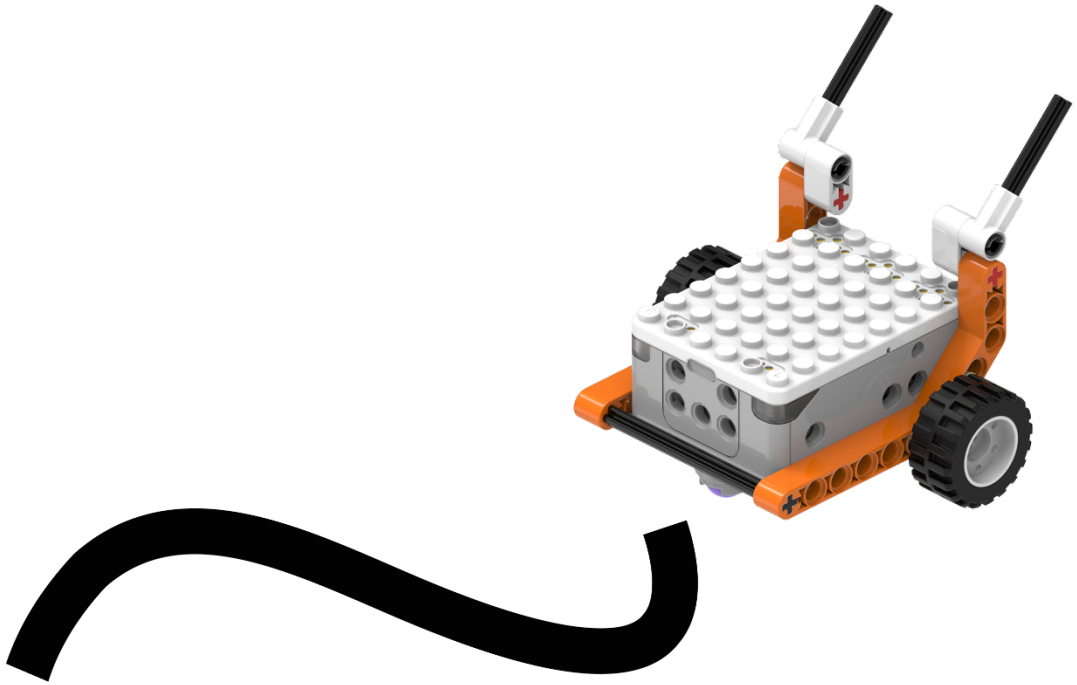
Click the start button and see if the robot can patrol along the black line.



Play and Try

Let’s compete:

Contestants, get ready! Let's see whose car reaches the finish line the fastest!



Kids, is there a way to make the robot even stronger?

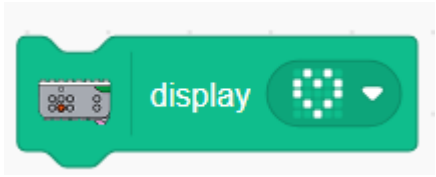
CREATION

Create

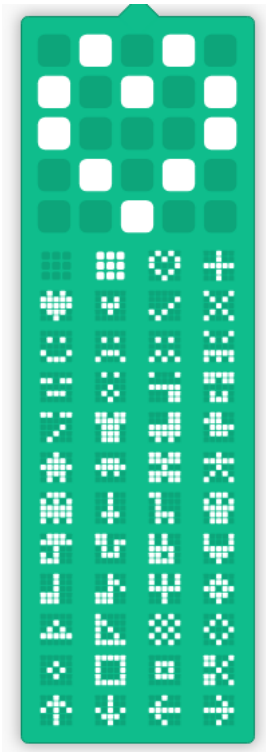
1.How can the car detect an obstacle and display an × icon on the screen?

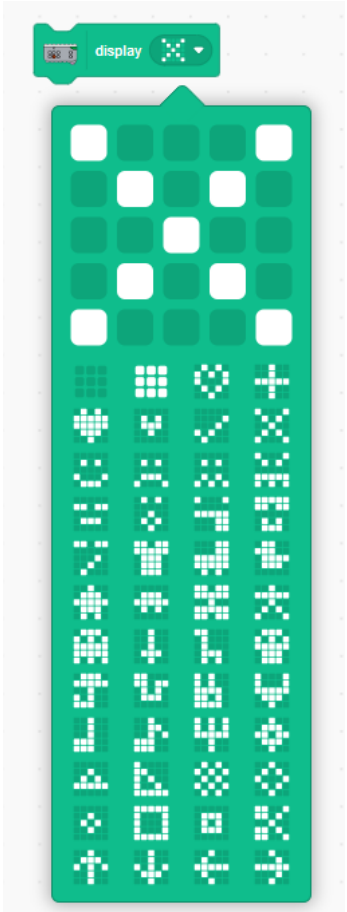
Introductions

Module Explanation



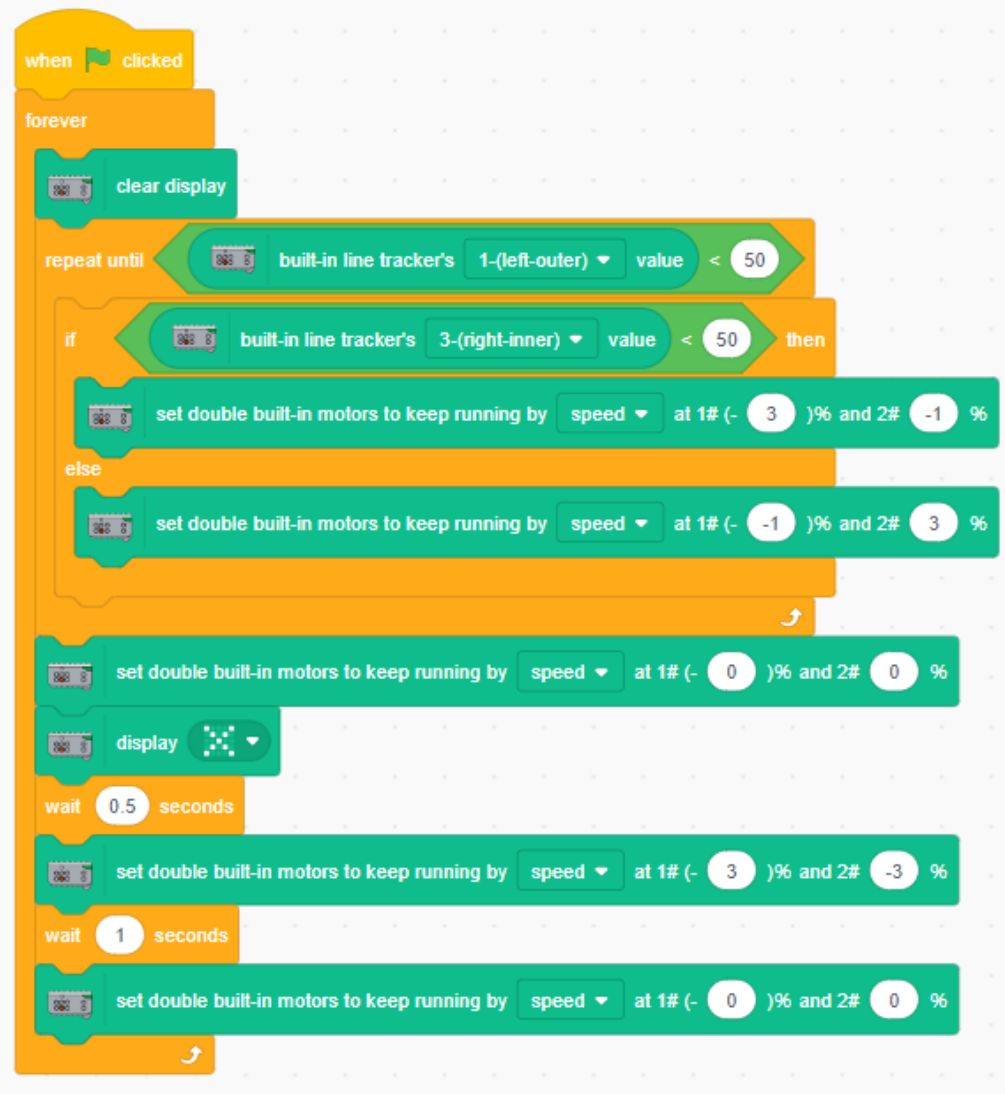
Draw your desired pattern using the LED display module.



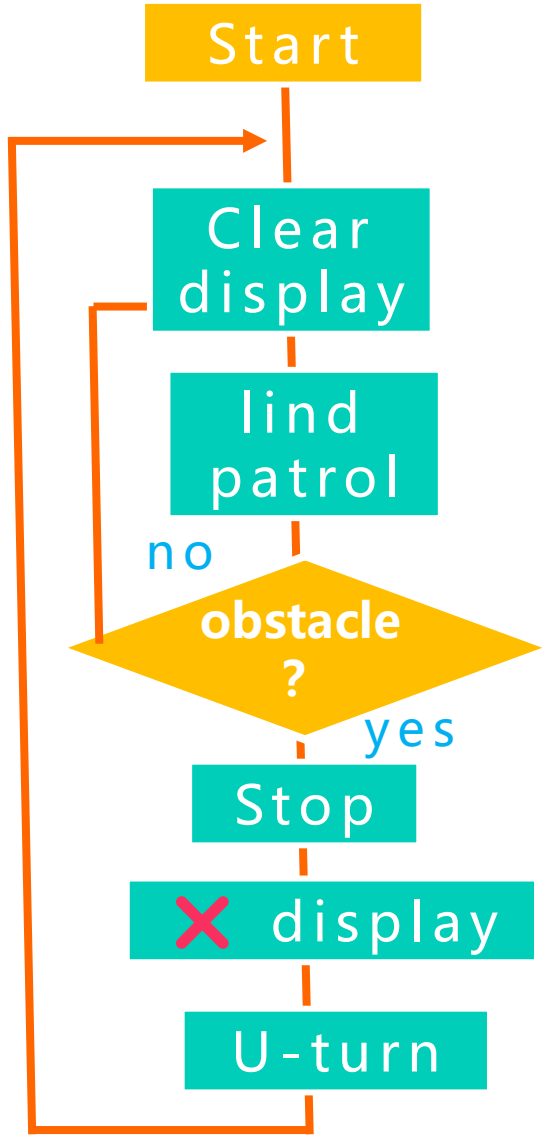


Introductions

Module Explanation

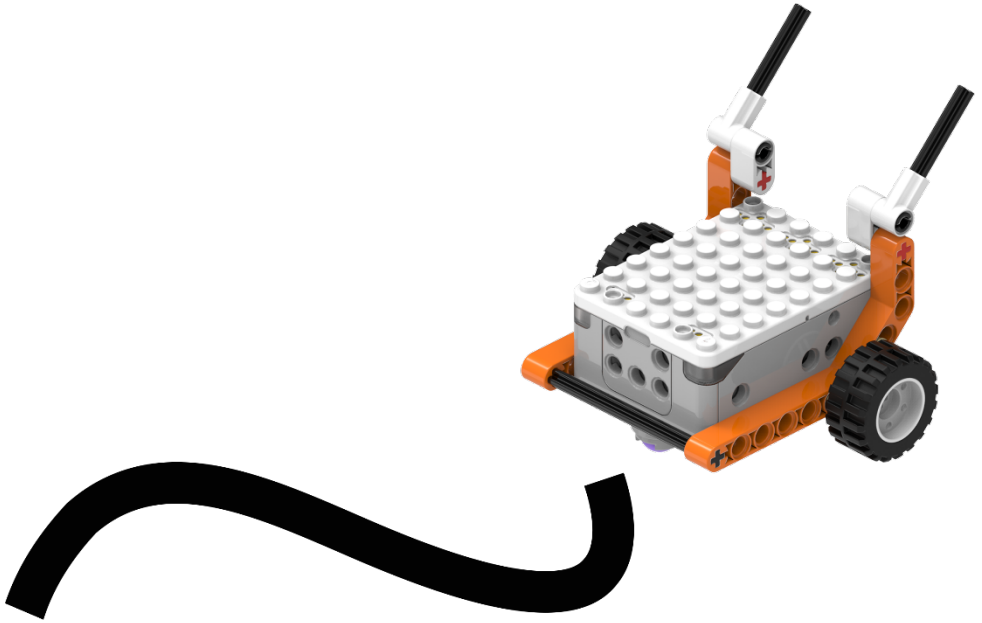


Repeat



Create

2.Is there any way to simplify the program?



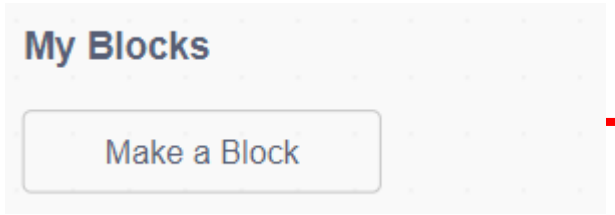
Introductions

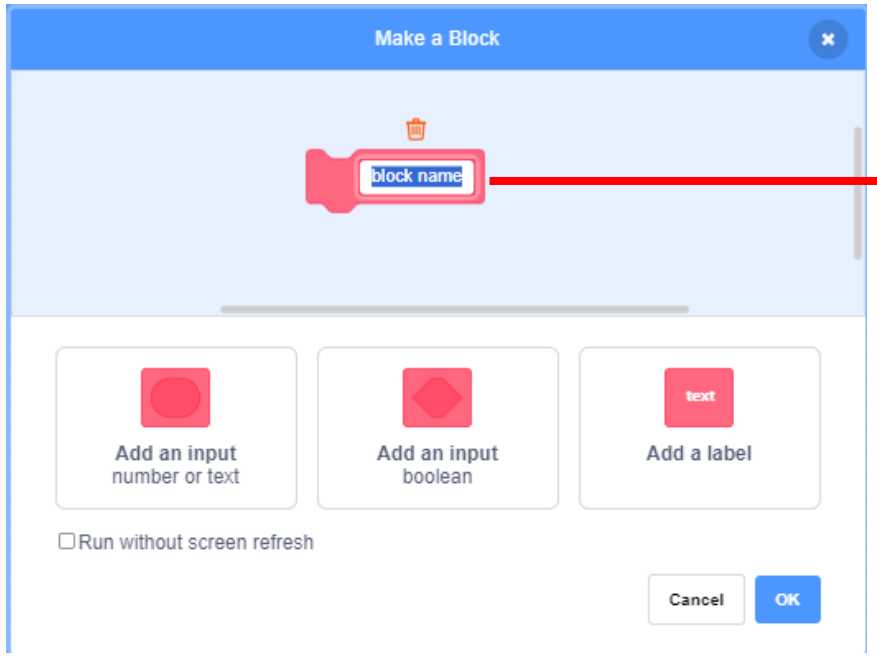
Module Explanation

My Blocks

Sometimes a part of the program may need to be used multiple times, which can cause excessive repetition of program units. We can simplify the program by using custom blocks.

If the program uses offline mode, there are three naming requirements.





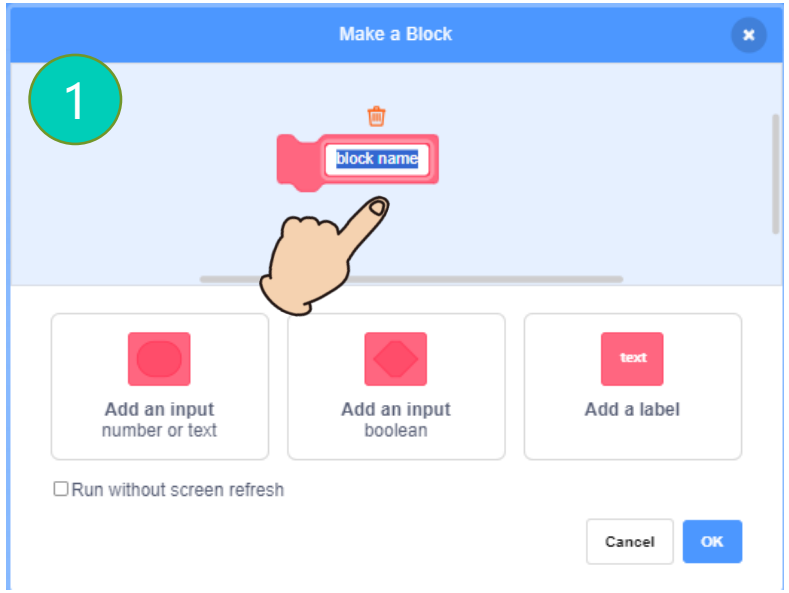
Must name with English/number

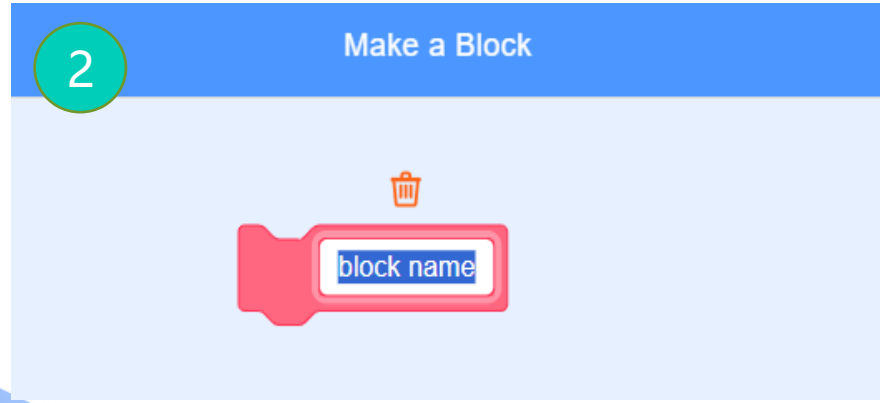
The first character cannot be a number

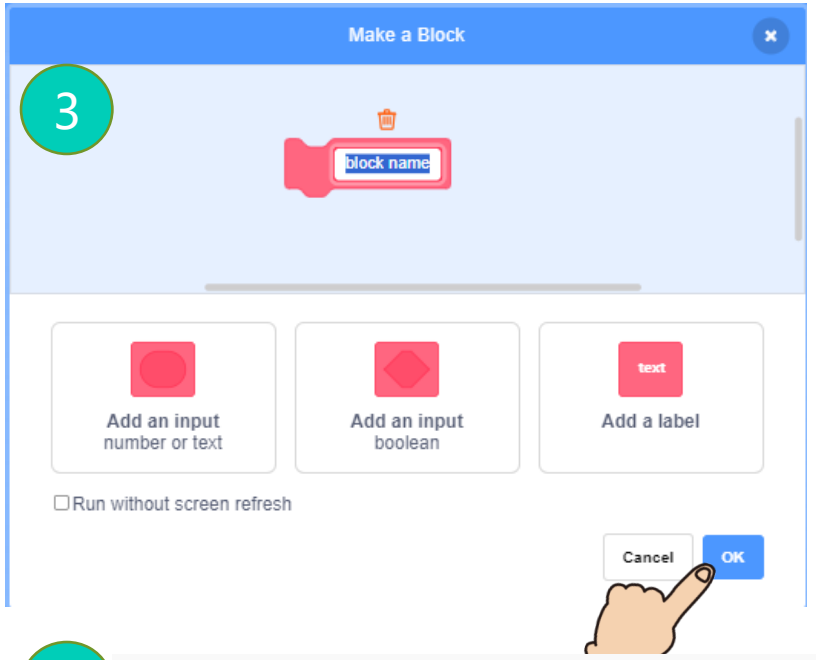
Not allow spaces

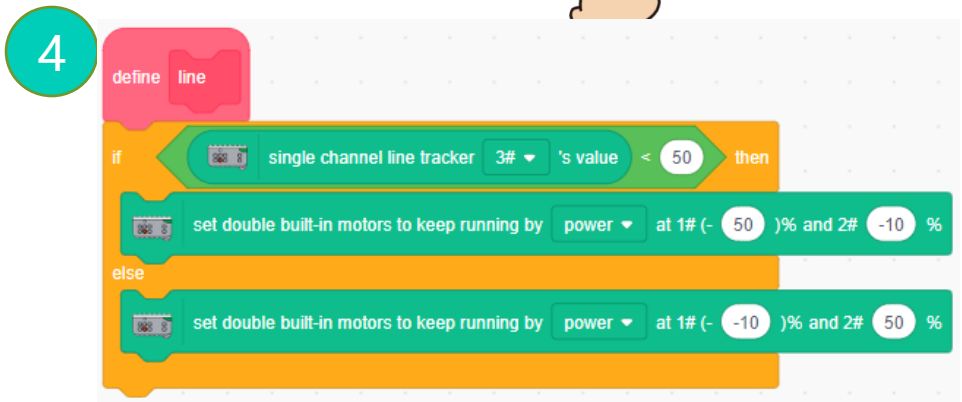
Introductions

Module Explanation



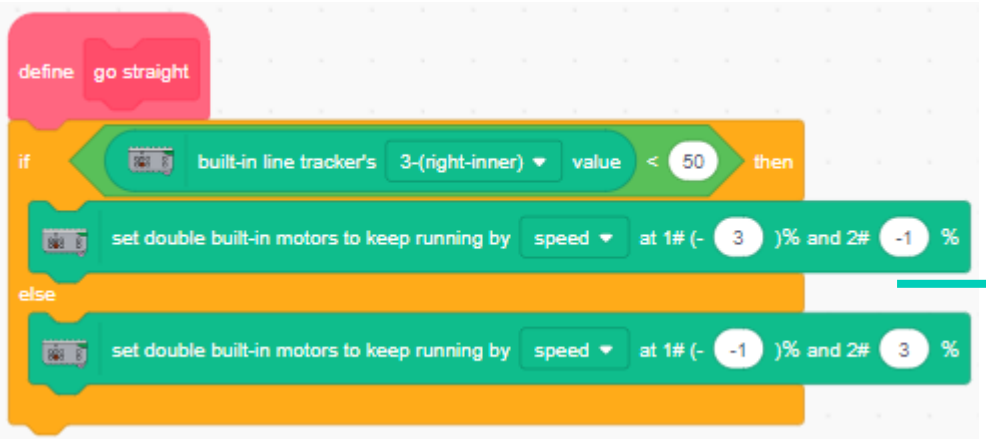


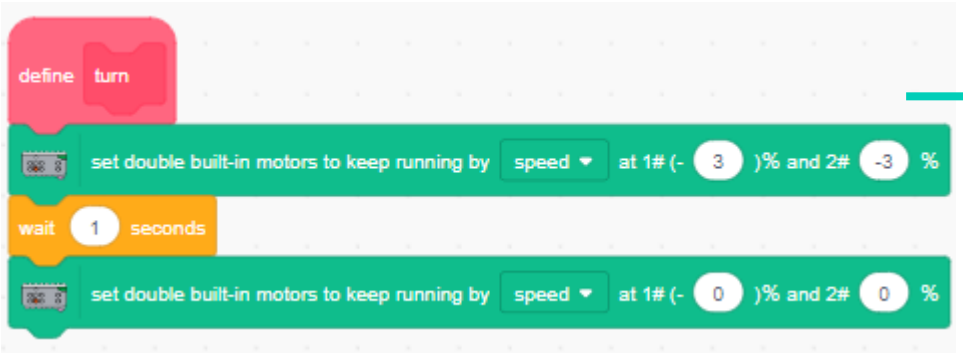


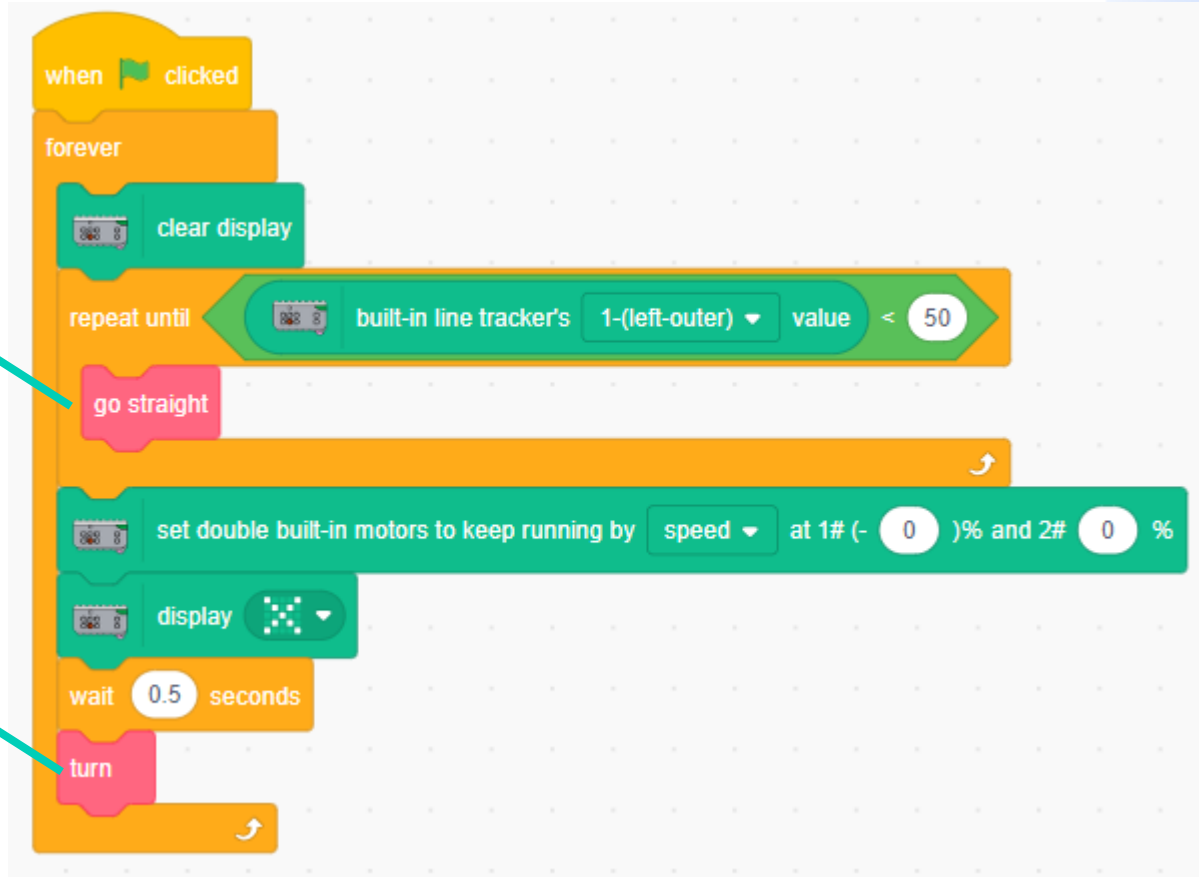


Introductions

Module Explanation



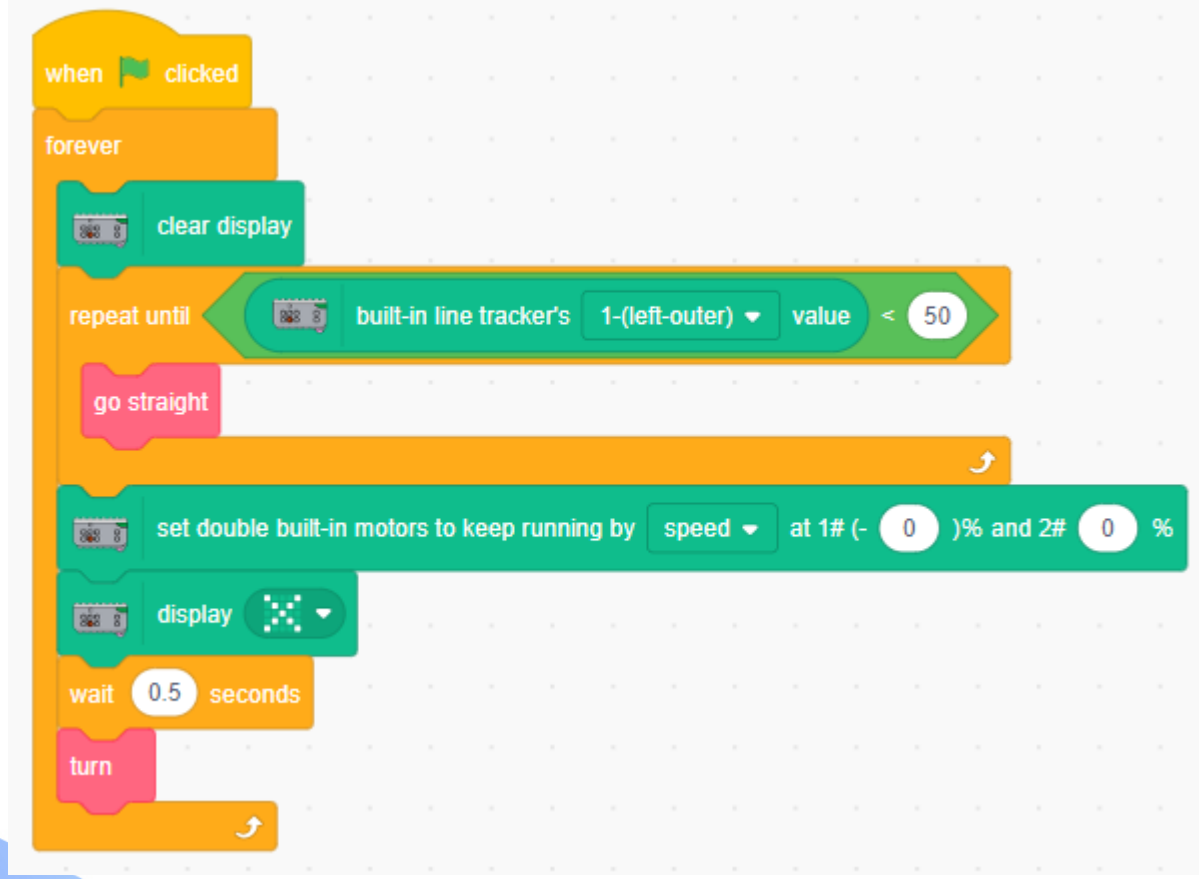


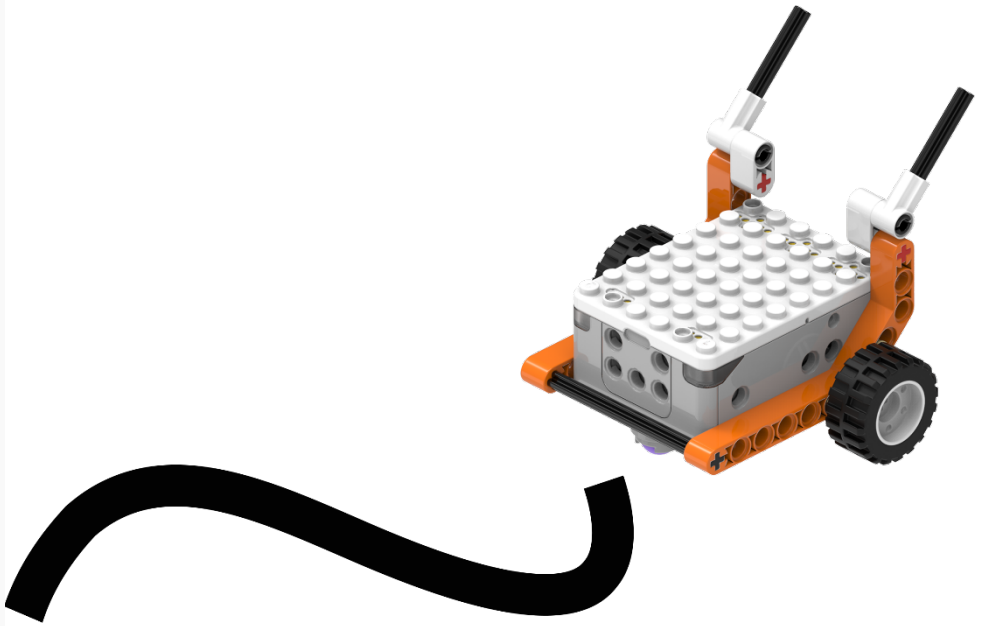


Create

2.Simplify the program

Please simplify the program according to the above method and see if the car runs correctly.



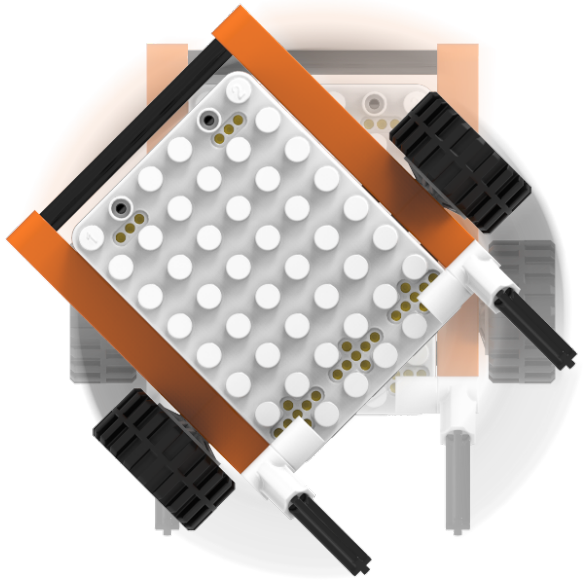


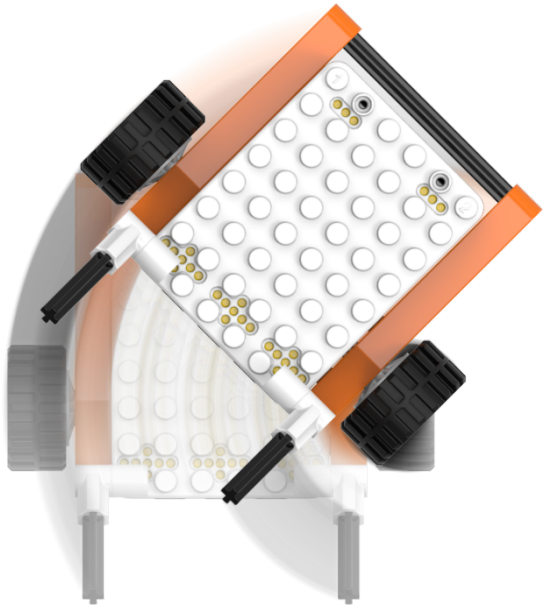
SUMMARY

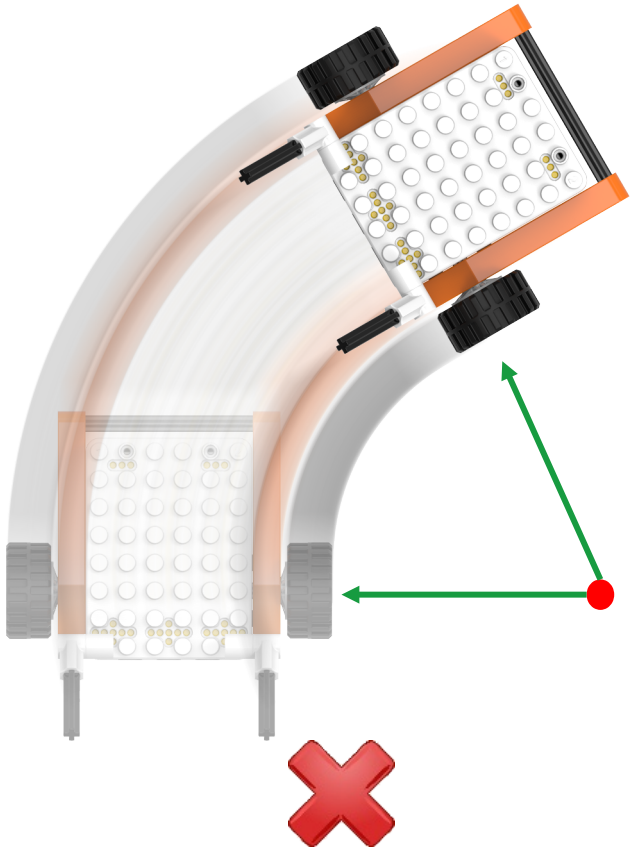
Summary

1.Module Explanation

When making a U-turn, choose the appropriate turning mode.

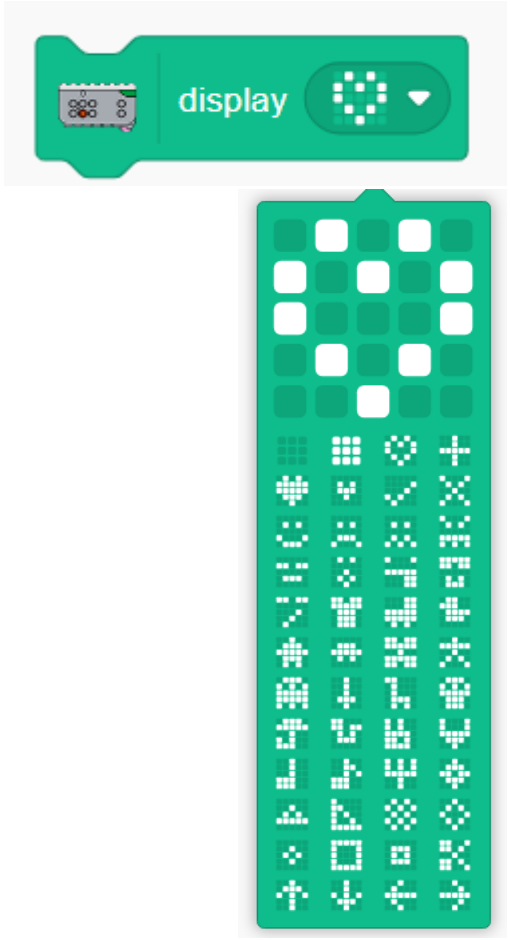




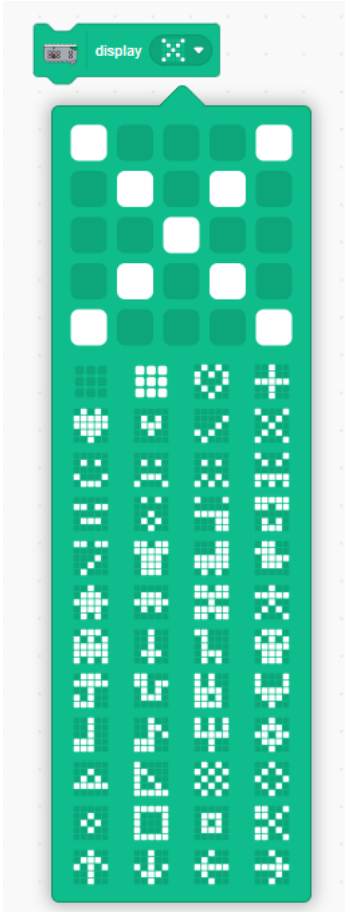


Summary

2. LED Light Module

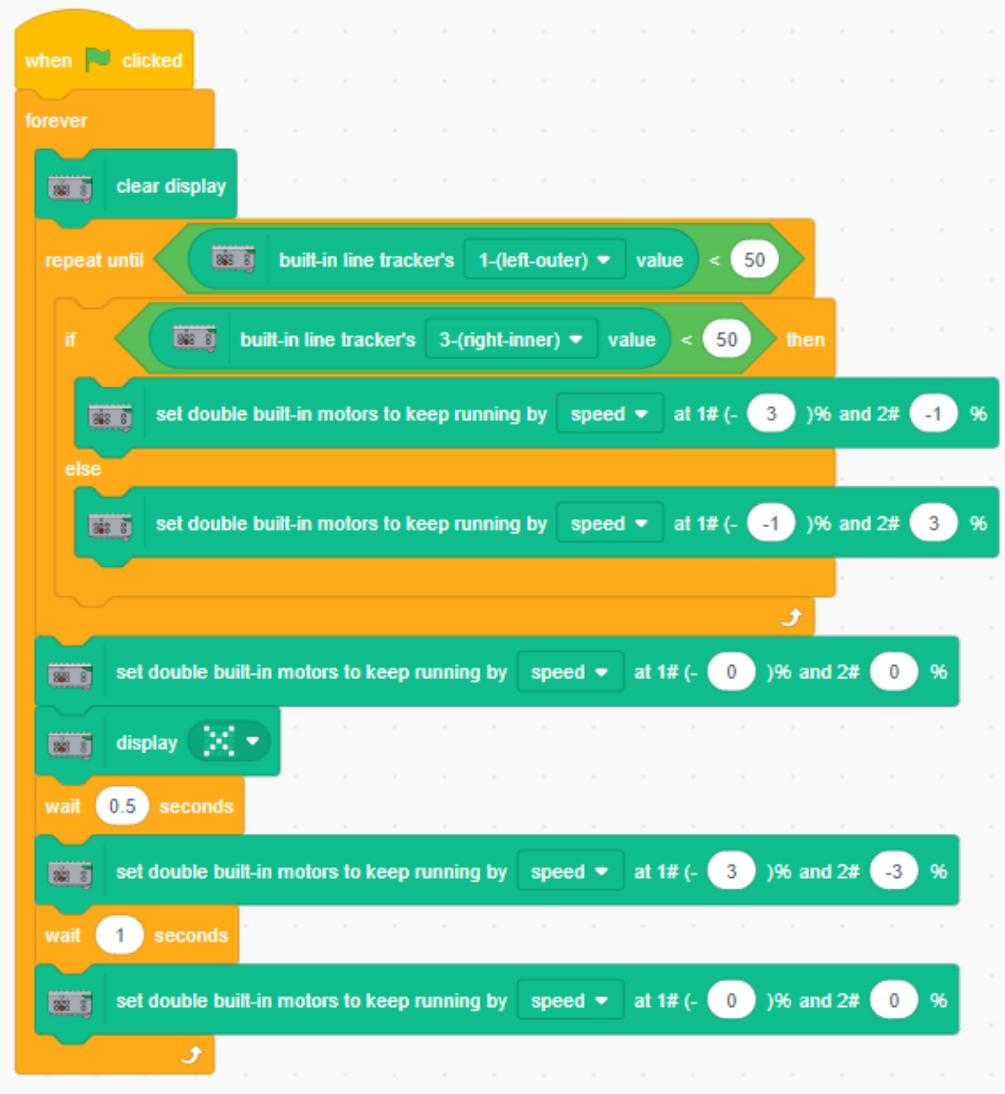


Use the LED display module to draw the pattern you need.

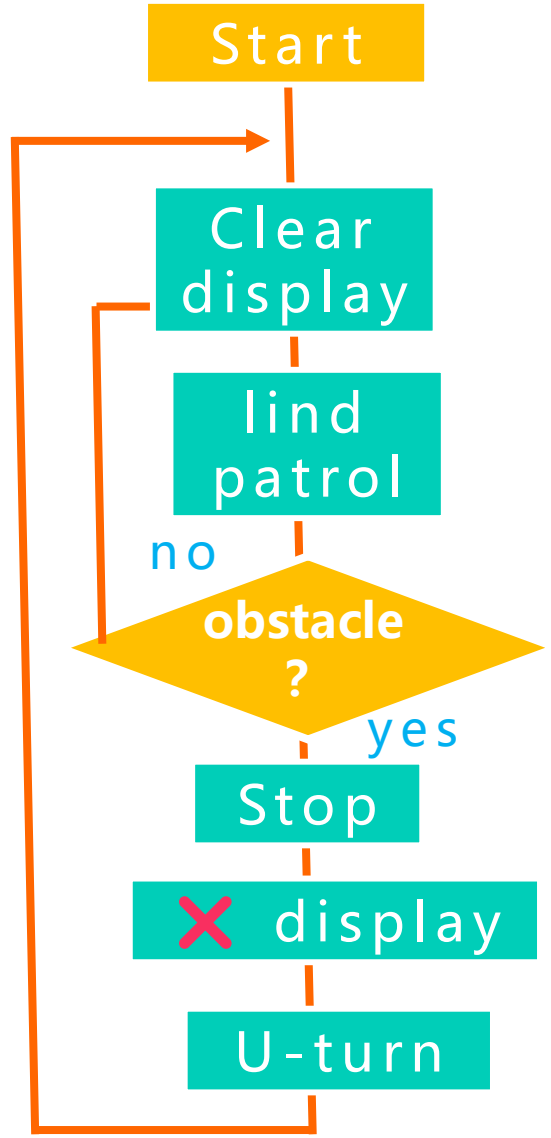


Summary

3. Program Analysis

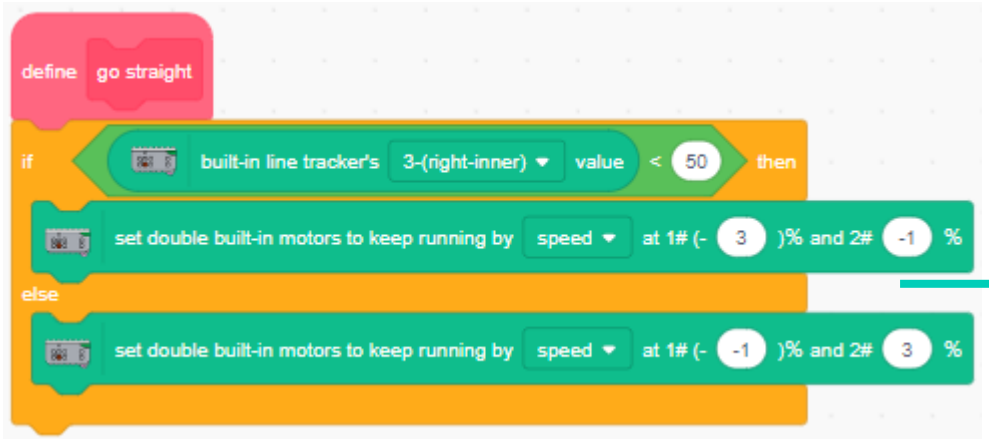


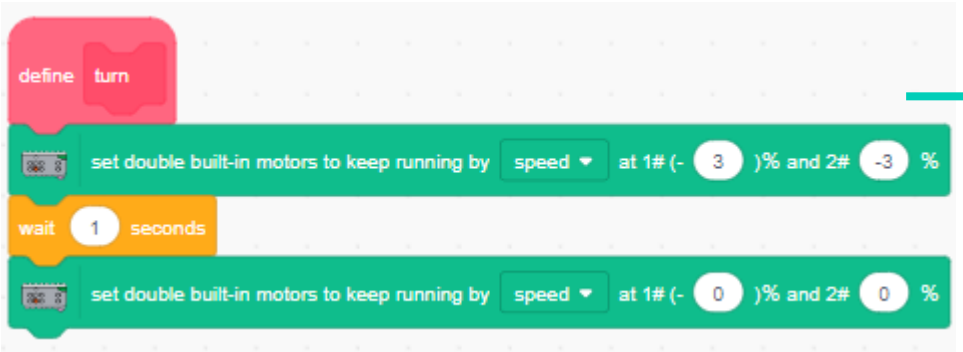
Repeat

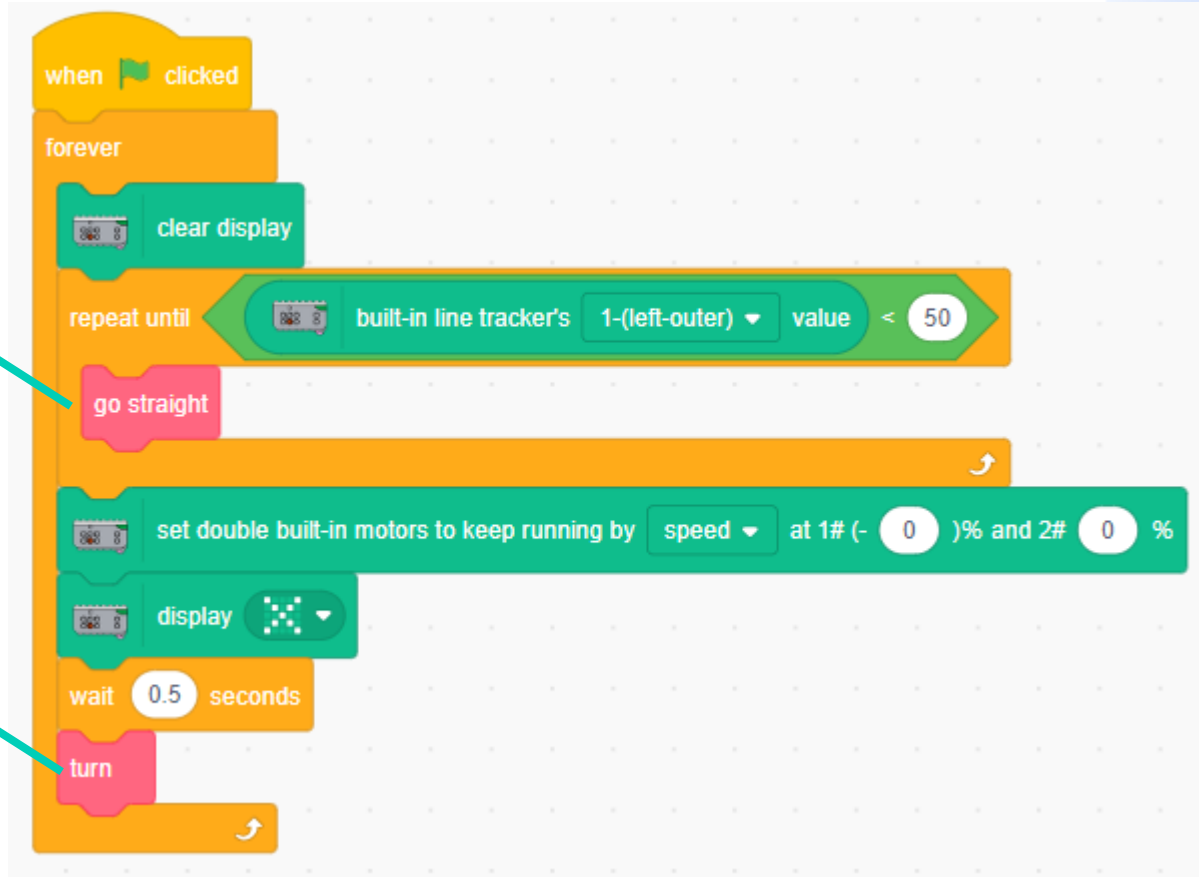


Summary

4. Make a block







SHARE WITH YOUR PARENTS

Share the knowledge about the Patrol Car with your mom and dad when you get home!