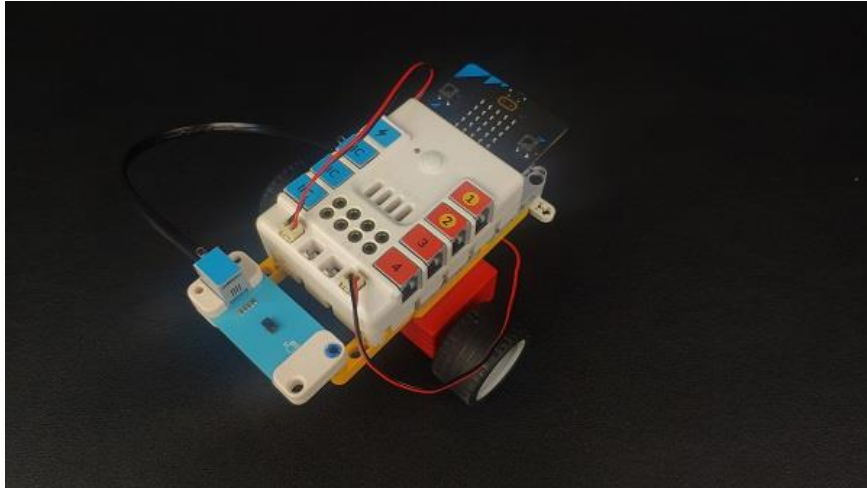


## 35. Case 34: Gesture Recognition Car

### 35.1. Introduction

This is a simple car. We can install gesture recognition sensors on the car to control the car's driving route based on gestures.



### 35.2. Quick Start

#### Materials Required

Nezha expansion board × 1

micro:bit V2 × 1

Motors × 2

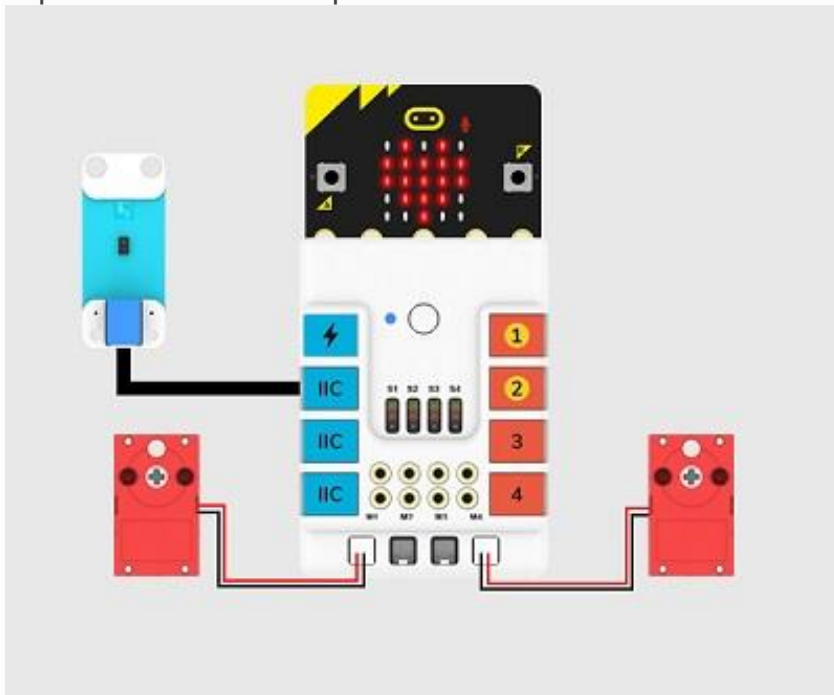
Gesture sensor × 1

Bricks × n

Tips: [Purchase Interactive coding accessories pack here.](#)

#### Connection Diagram

Insert the micro:bit, connect the motors to M1 and M4 and the gesture sensor to IIC port on the Nezha expansion board as the picture shows.

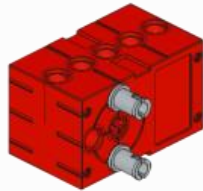
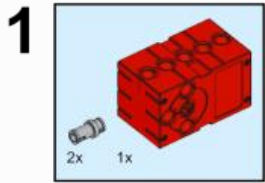


#### Assembly Video

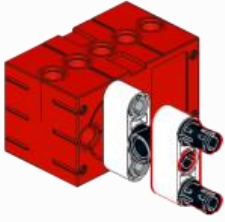
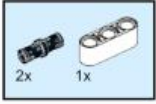
link: <https://youtu.be/ib-xX0MS41U>

#### Assembly Steps

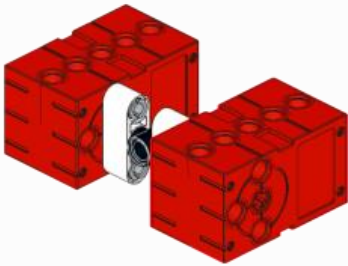
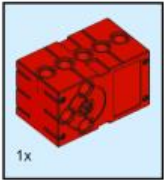
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- 1x 14720, 86
- 1x 32524, 1
- 1x 32524, 3
- 1x 87082, 11
- 2x 56145, 86
- 1x
- 2x 40490, 3
- 2x 55978, 11
- 2x 64179, 86
- 1x
- 2x 43093, 7
- 4x 32002, 86
- 2x 32523, 1
- 1x
- 2x 6558, 7
- 2x 4519, 86
- 2x 32449, 1
- 2x 4265c, 3
- 1x 99948, 67
- 1x 92911, 86
- 2x 32526, 3



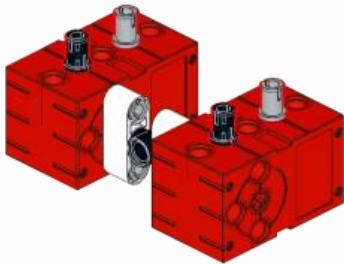
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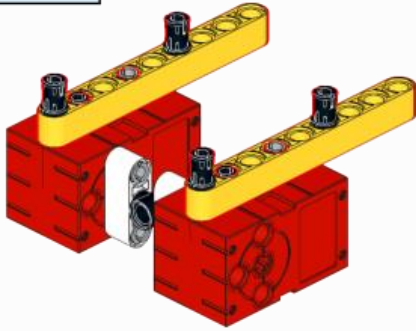
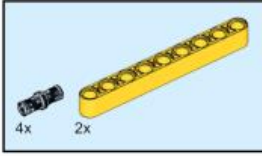
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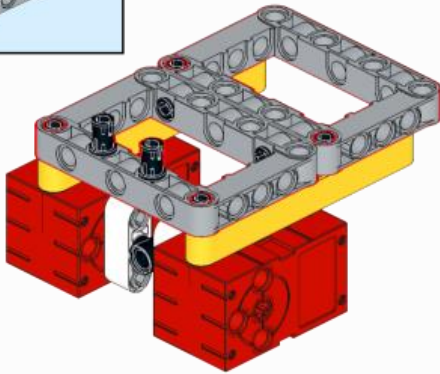
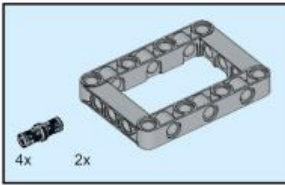
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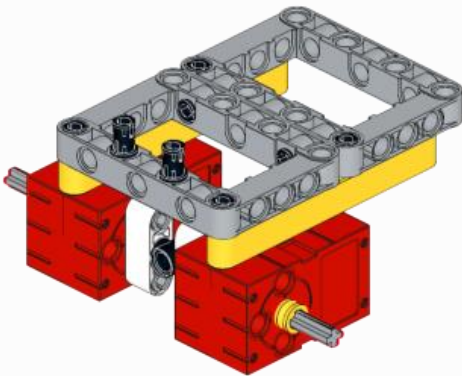
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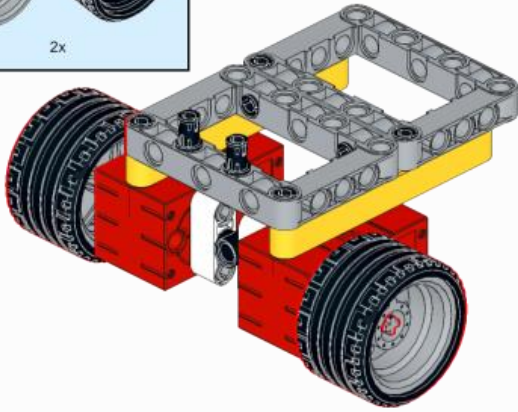
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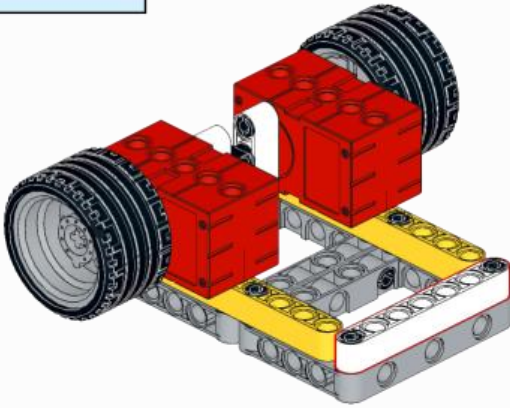
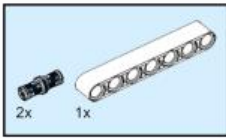
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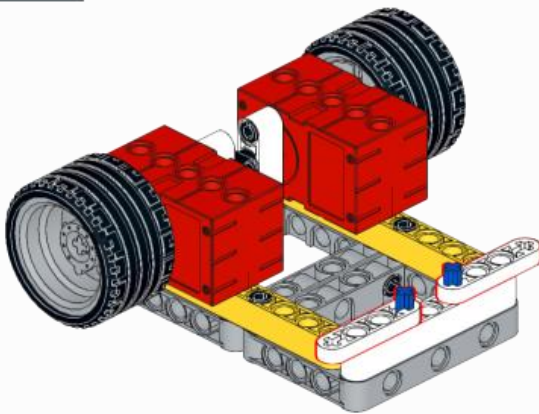
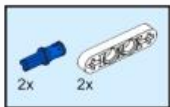
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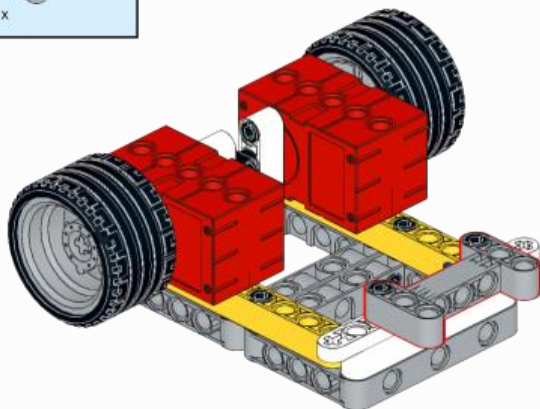
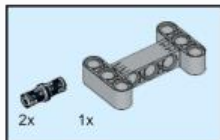
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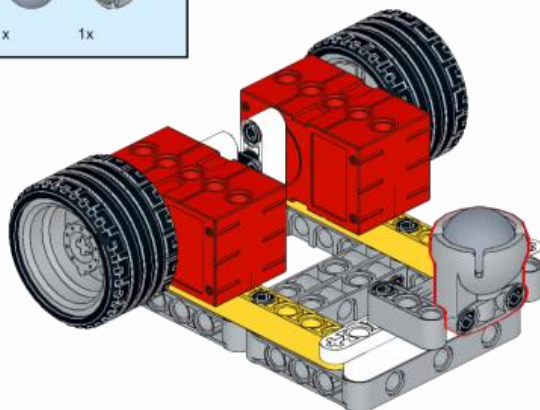
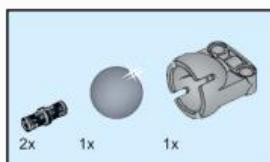
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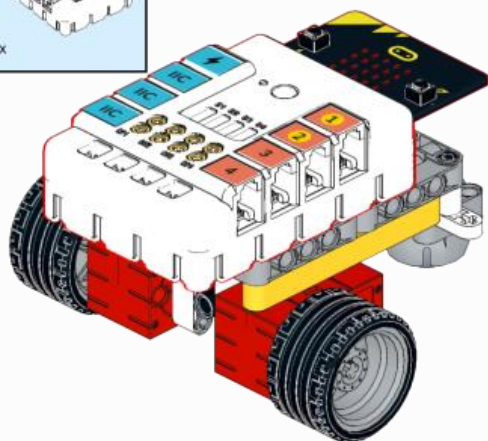
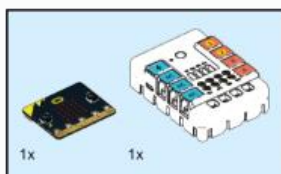
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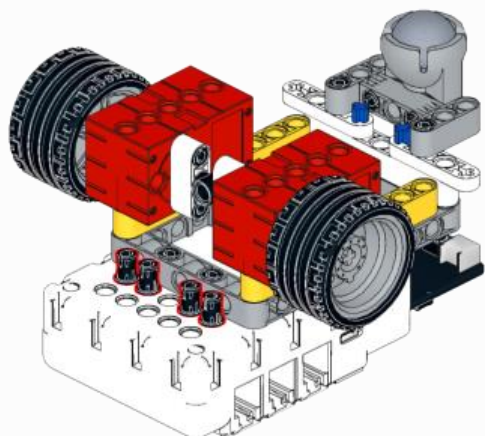


14

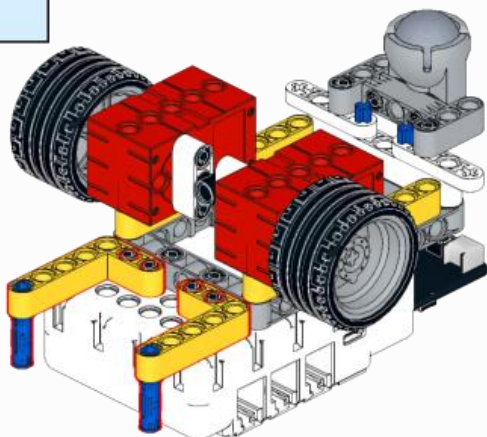
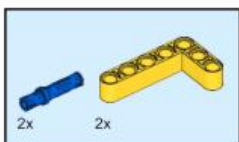




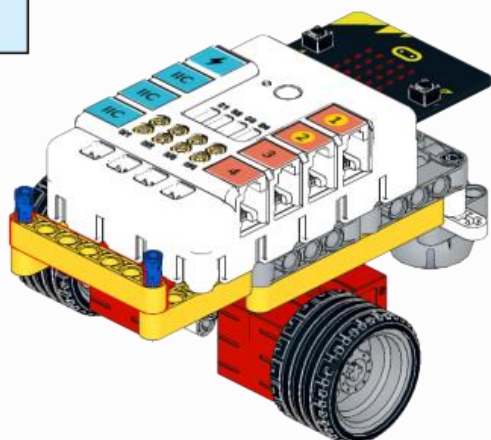
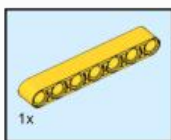
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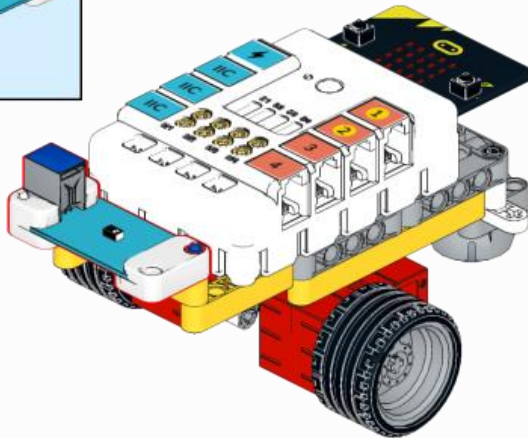
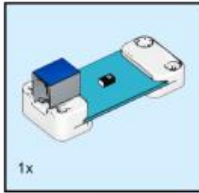
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17

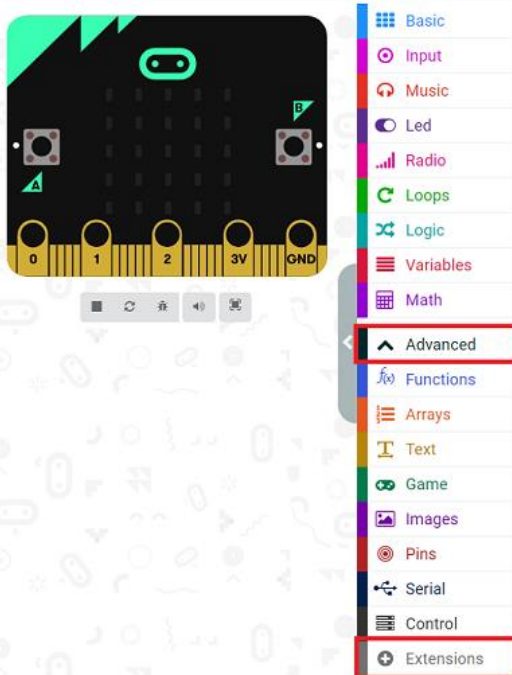


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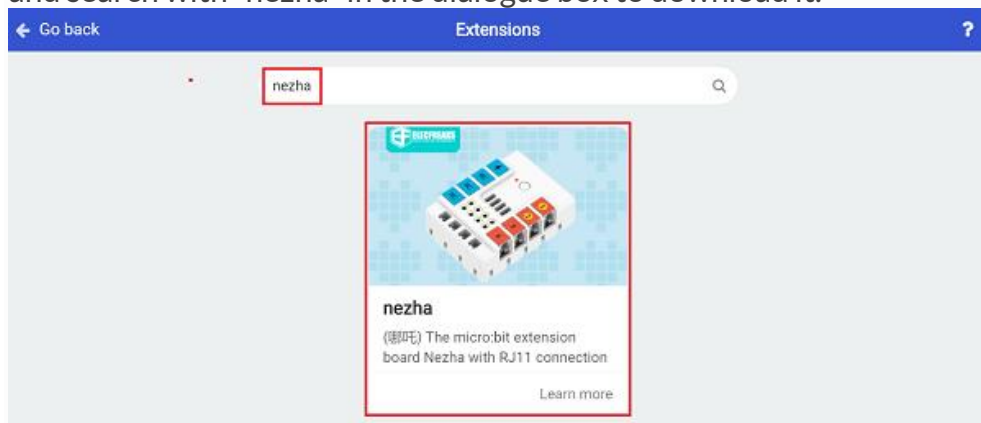


### 35.3. MakeCode Programming Step 1

Click “Advanced” in the MakeCode to see more choices.



For programming, we need to add a package: click “Extensions” at the bottom of the MakeCode drawer and search with “nezha” in the dialogue box to download it.



Notice: If you met a tip indicating that some codebases would be deleted due to incompatibility, you may continue as the tips say or create a new project in the menu.



## Step 2

Code as below:

```
Gesture sensor IIC port is Down
Set motor M1 speed to -100 %
Set motor M4 speed to -100 %
pause (ms) 2000
Stop all motor

Gesture sensor IIC port is Left
Set motor M1 speed to 100 %
Set motor M4 speed to -100 %
pause (ms) 500
Stop all motor

Gesture sensor IIC port is Right
Set motor M1 speed to -100 %
Set motor M4 speed to 100 %
pause (ms) 500
Stop all motor

Gesture sensor IIC port is Up
Set motor M1 speed to 100 %
Set motor M4 speed to 100 %
pause (ms) 2000
Stop all motor
```

```
Gesture sensor IIC port is Up
Set motor M1 speed to 100 %
Set motor M4 speed to 100 %
2000 ms szünet
Stop all motor

Gesture sensor IIC port is Left
Set motor M1 speed to 100 %
Set motor M4 speed to -100 %
2000 ms szünet
Stop all motor

Gesture sensor IIC port is Down
Set motor M1 speed to -100 %
Set motor M4 speed to -100 %
2000 ms szünet
Stop all motor

Gesture sensor IIC port is Right
Set motor M1 speed to -100 %
Set motor M4 speed to 100 %
2000 ms szünet
Stop all motor
```

## Reference

Link: <https://makecode.microbit.org/WkPER99xMP8e>

You may also download it directly below:

---

## Result

After powering on, the car moves along with the indicated gestures.

