# Case 27: The Smart Garbage Can

## Contents

## 29.1. Purpose

Make a smart garbage can.
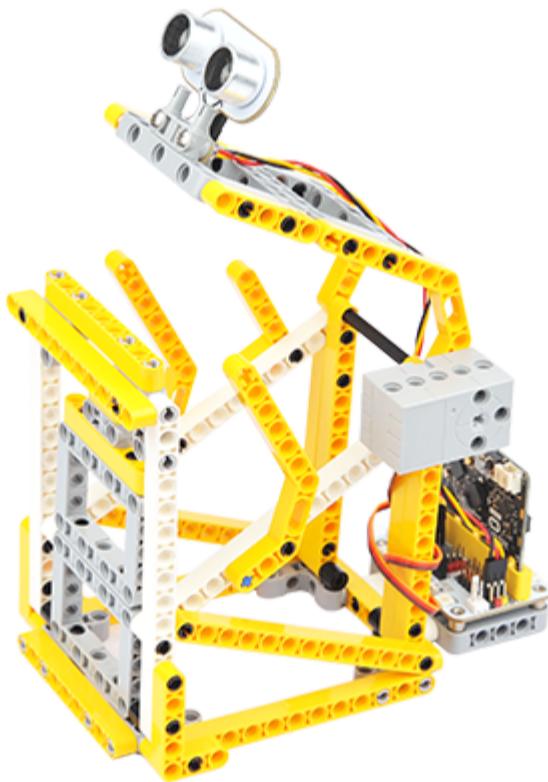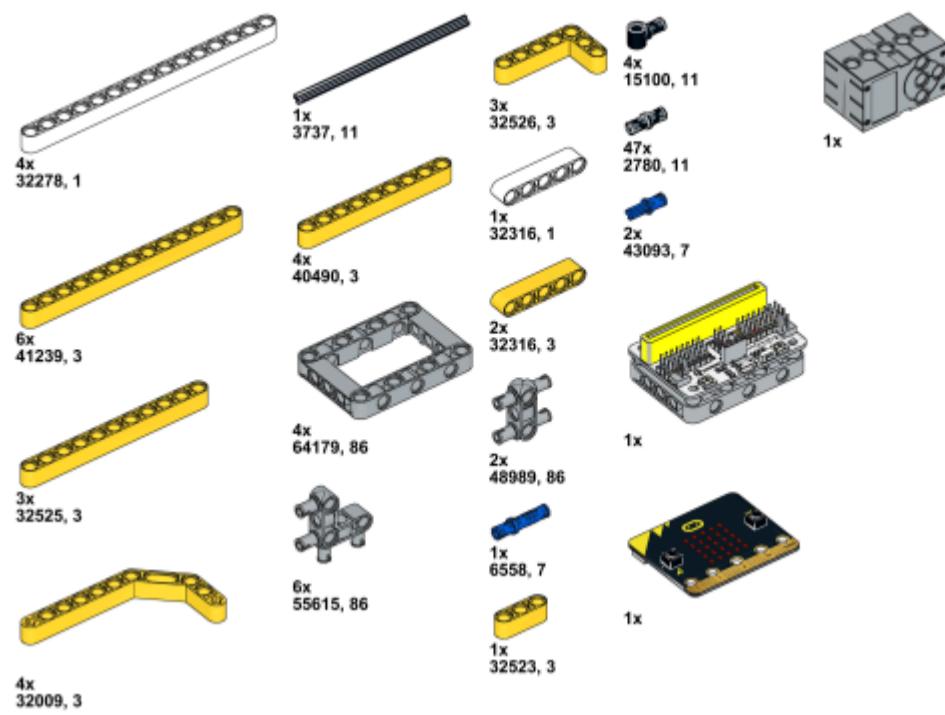


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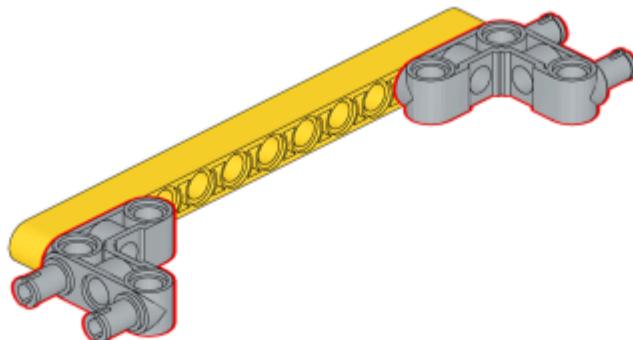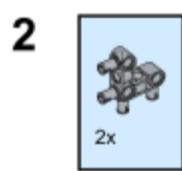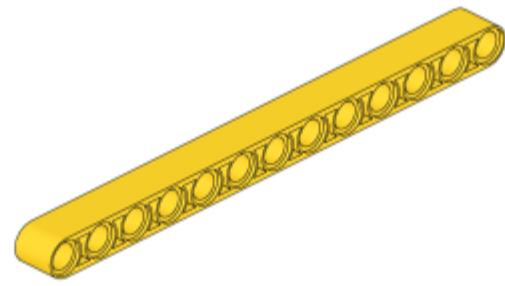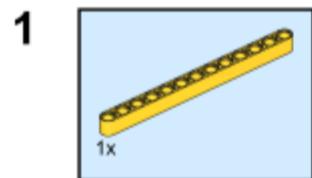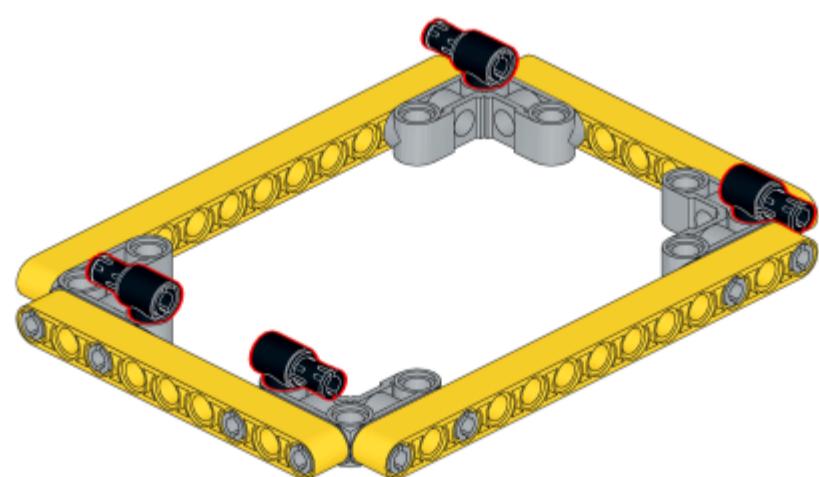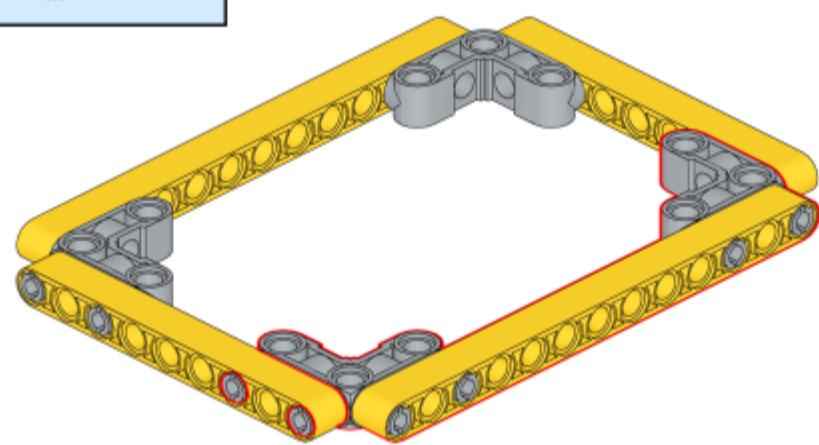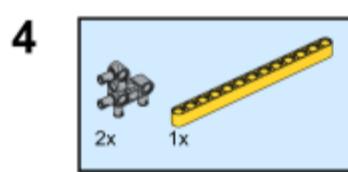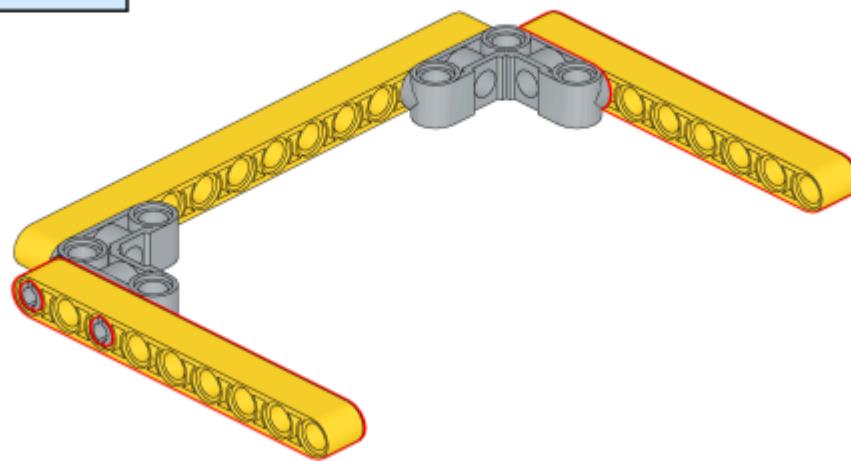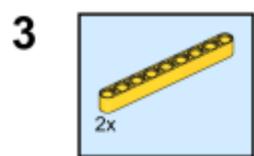
[micro:bit Wonder Building Kit](micro:bit Wonder Building Kit)

## 29.3. Materials Required

4x
32278, 1

6x
41239, 3

3x
32525, 3

4x
32009, 3

1x
3737, 11

4x
40490, 3

4x
64179, 86

6x
55615, 86

3x
32526, 3

1x
32316, 1

2x
32316, 3

2x
48989, 86

1x
6558, 7

1x
32523, 3

4x
15100, 11

47x
2780, 11

2x
43093, 7

1x

1x

1x
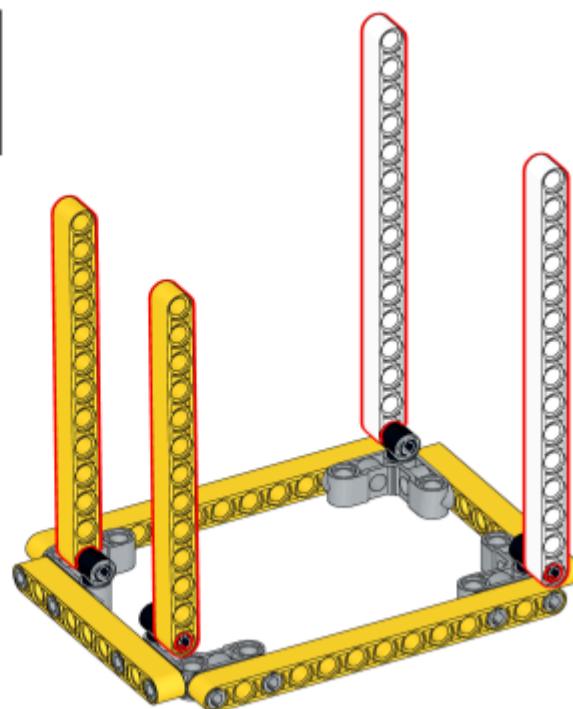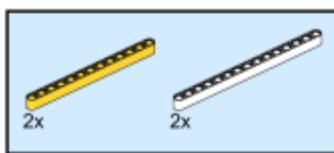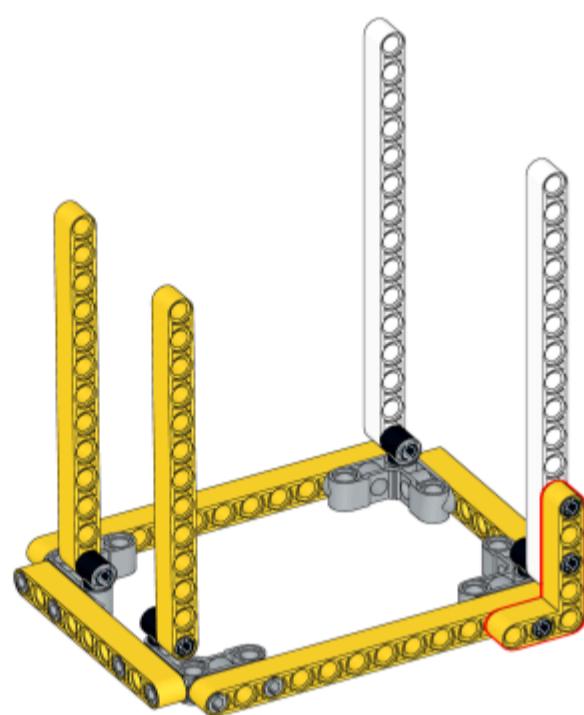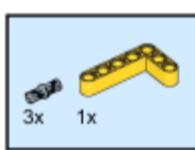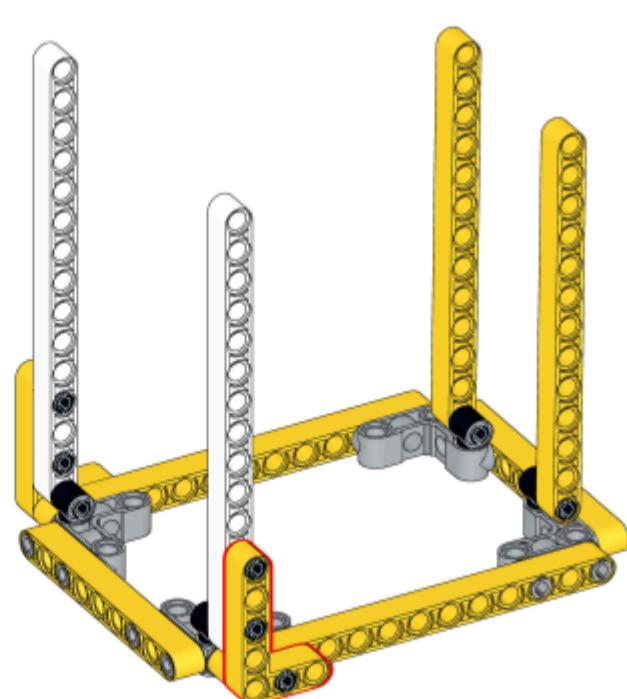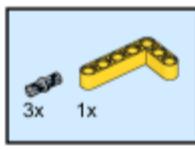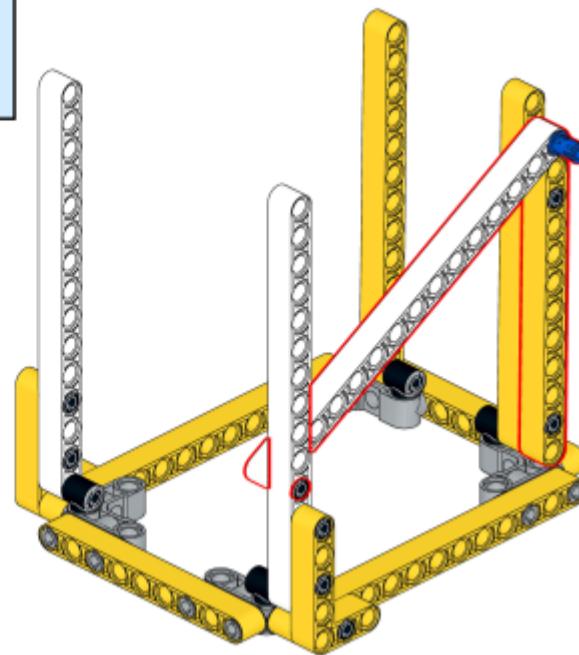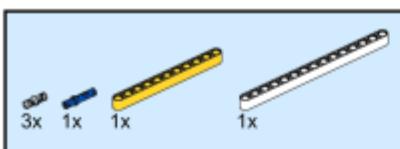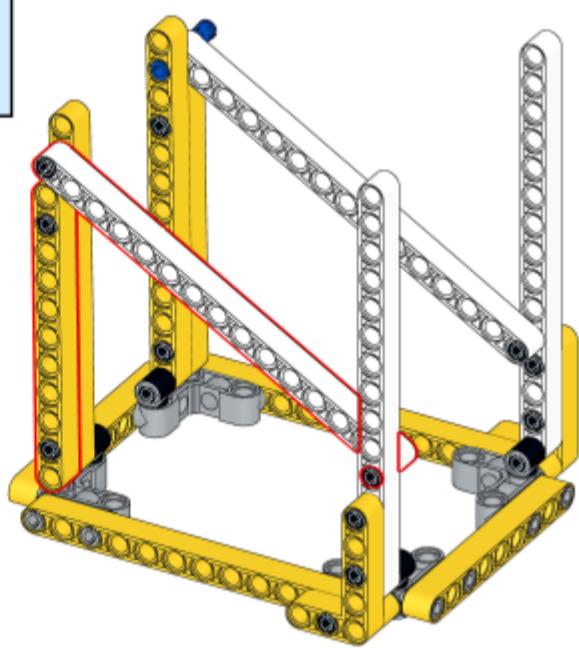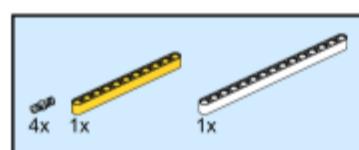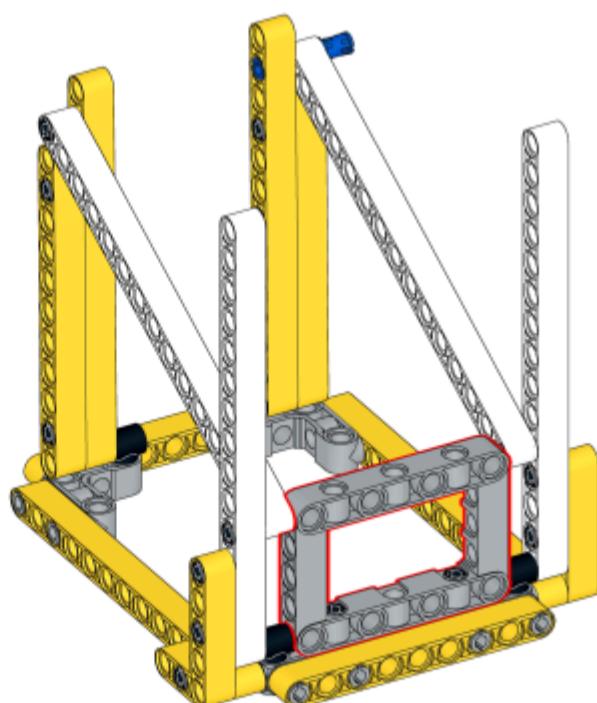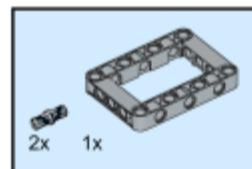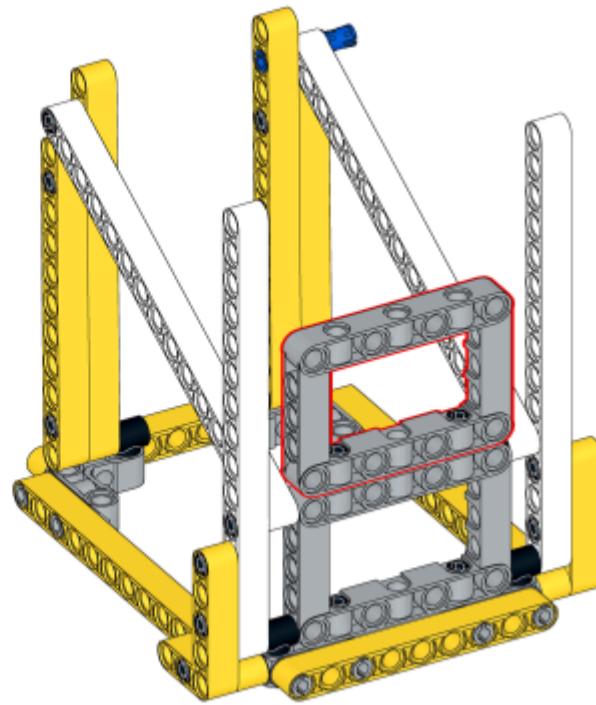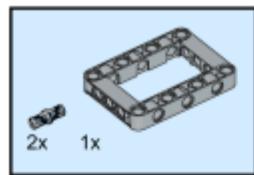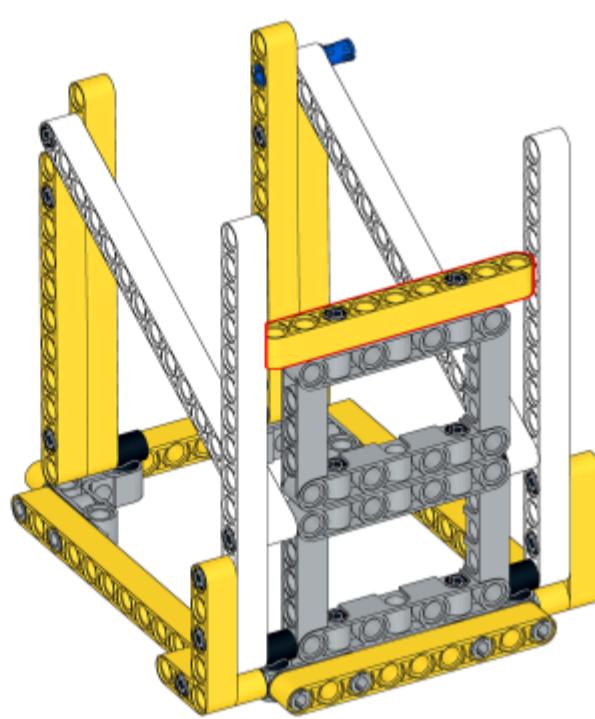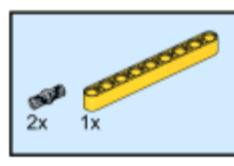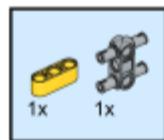
## 29.4. Bricks build-up

**1**



1x



**2**



2x

**3**

2x

**4**

2x 1x

**5**

4x 4x
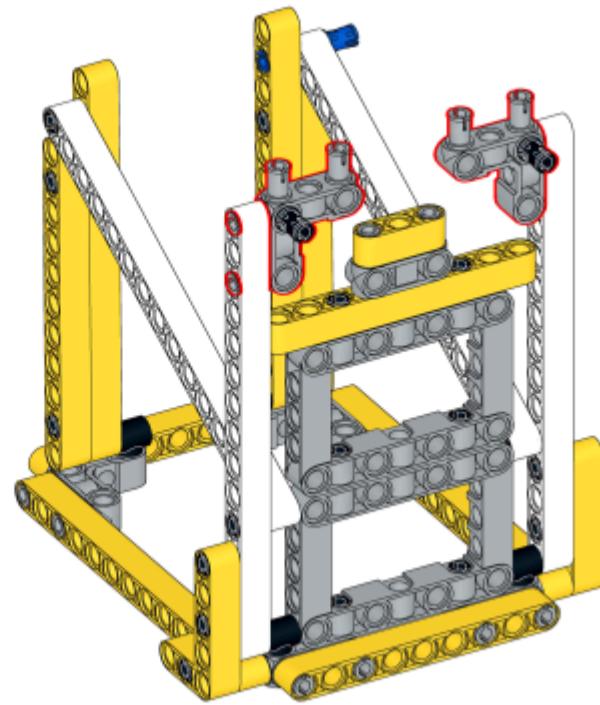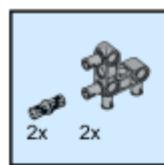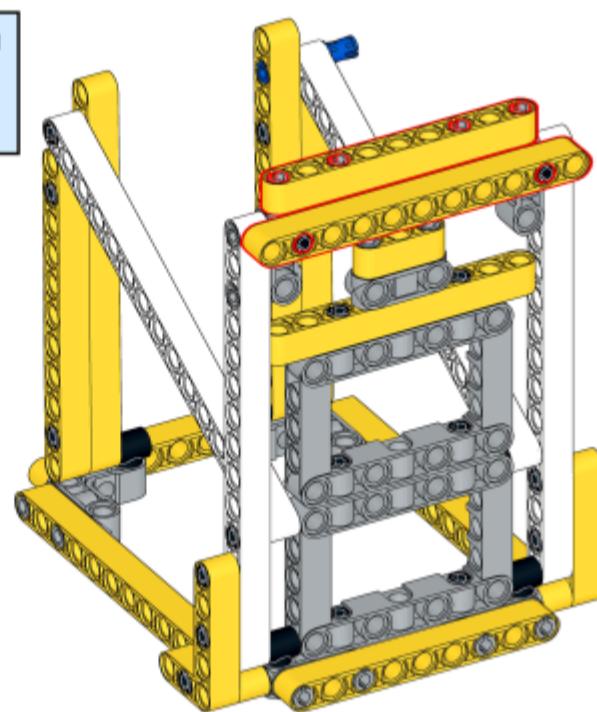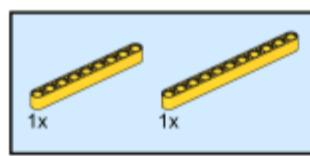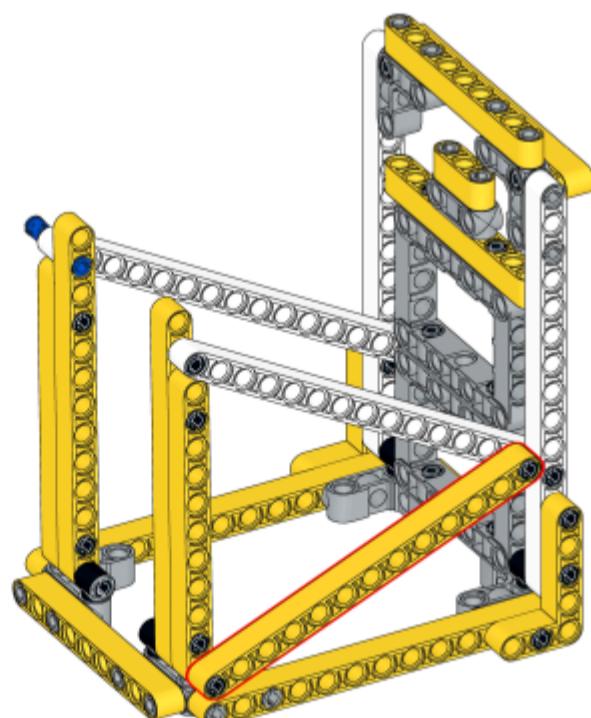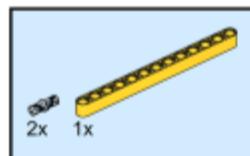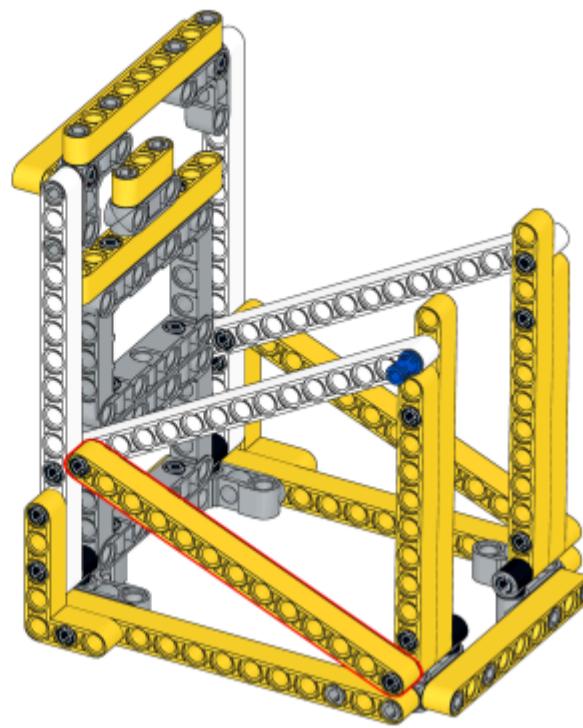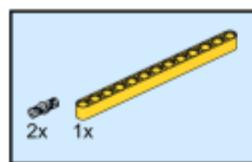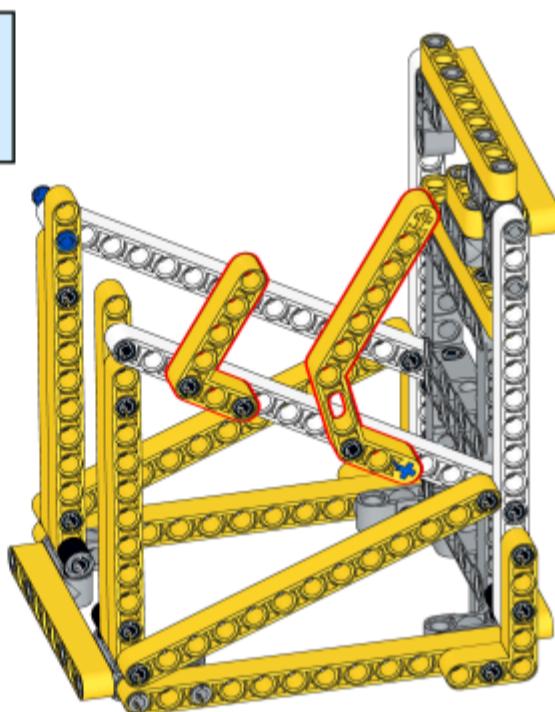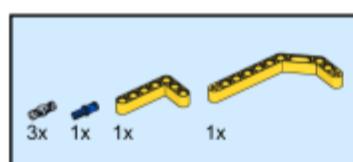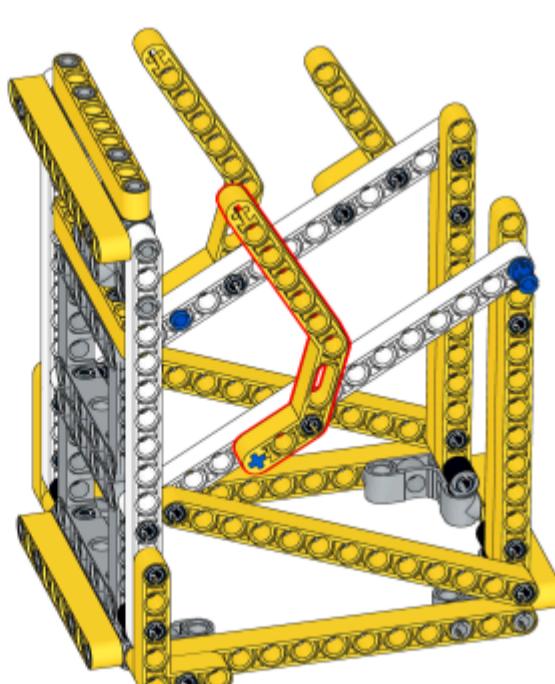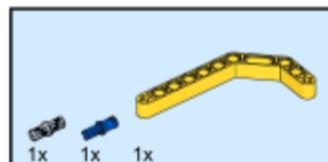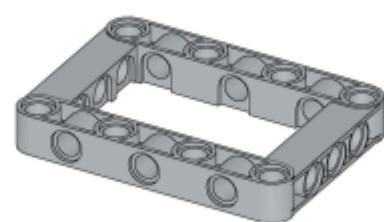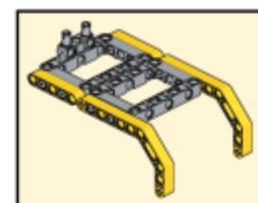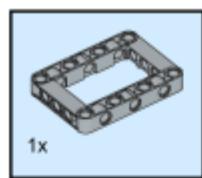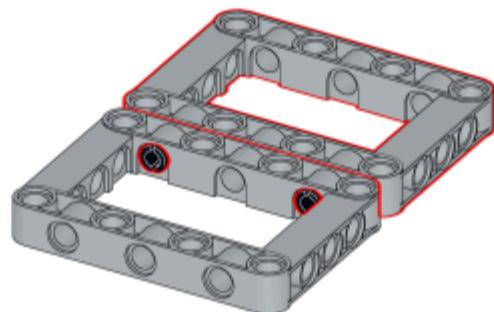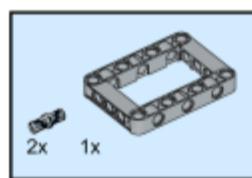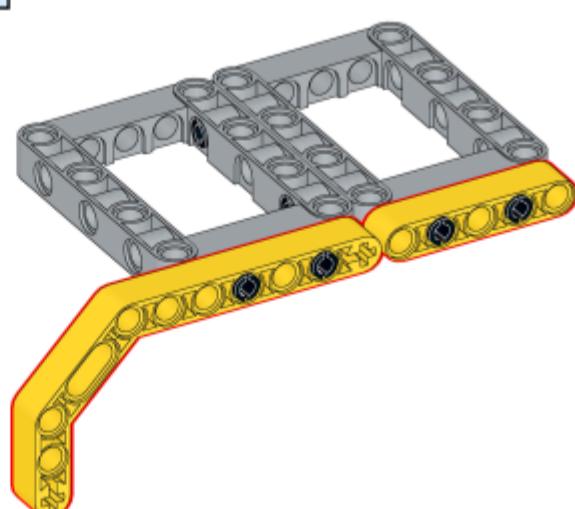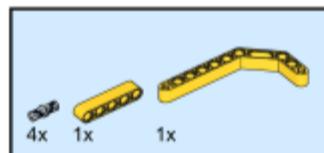
**6**

**7**

**8**
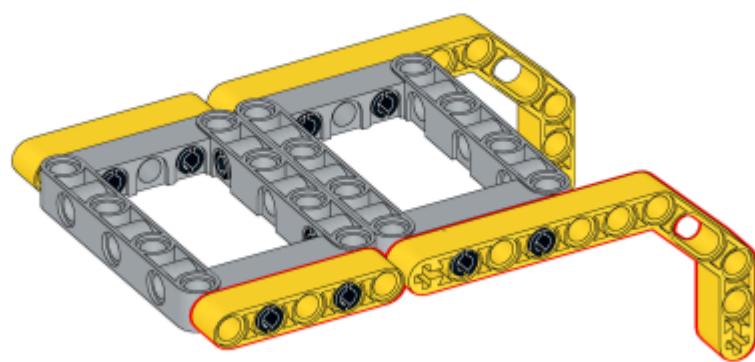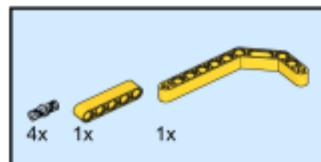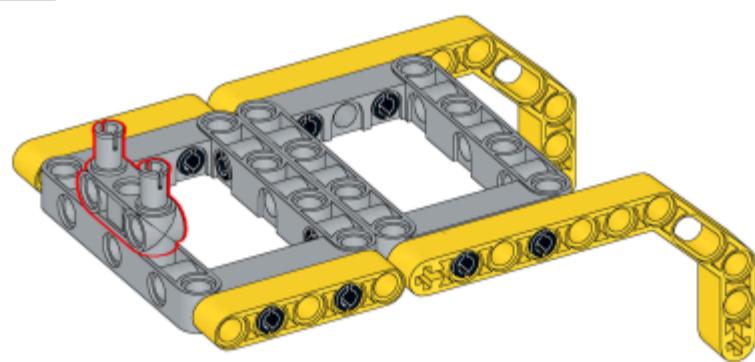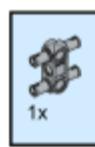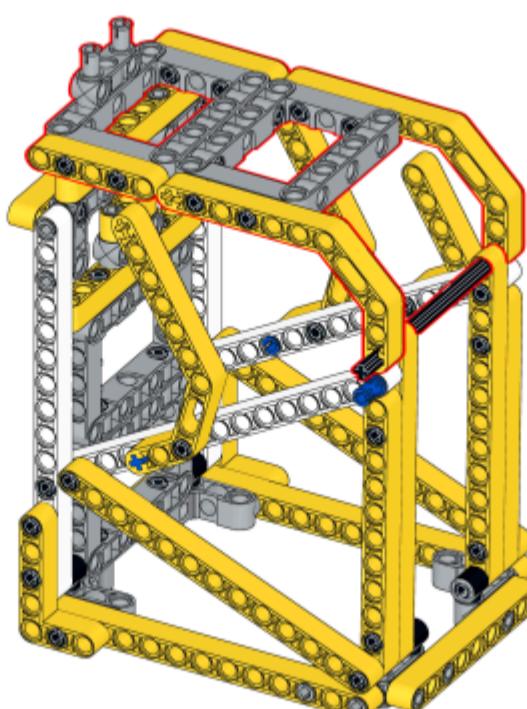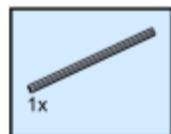
**9**

**10**

**11**
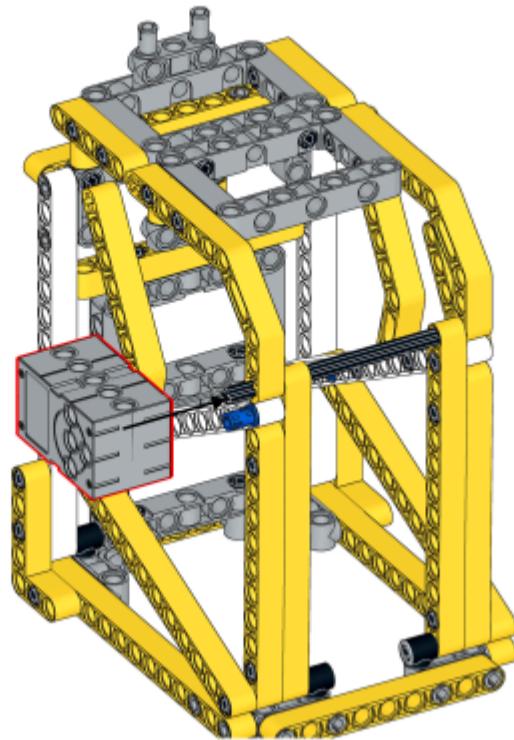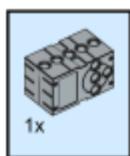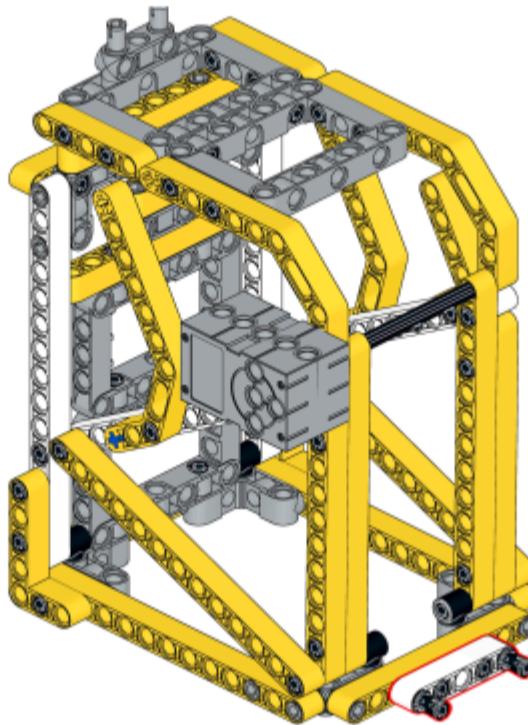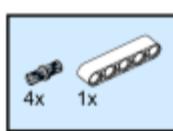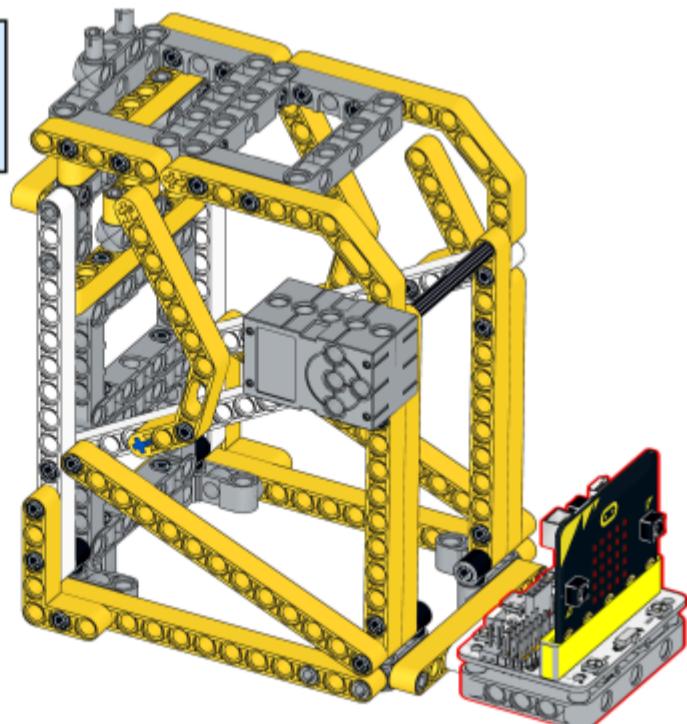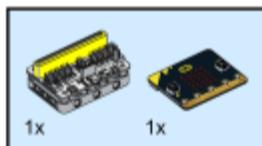
**12**

**13**

**14**

**15**



**16**



**17**

**18**

**19**

**20**

**21**

**24**



**25**



**26**

**27**

**28**

**29**
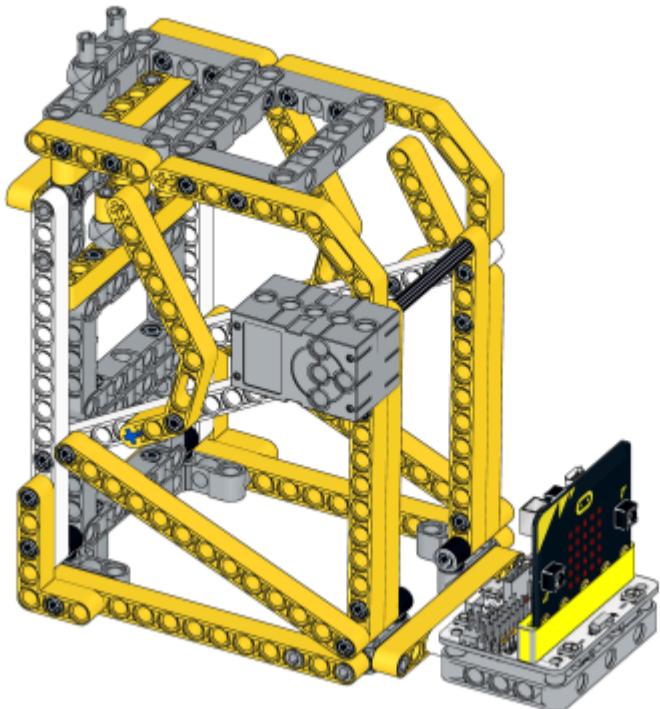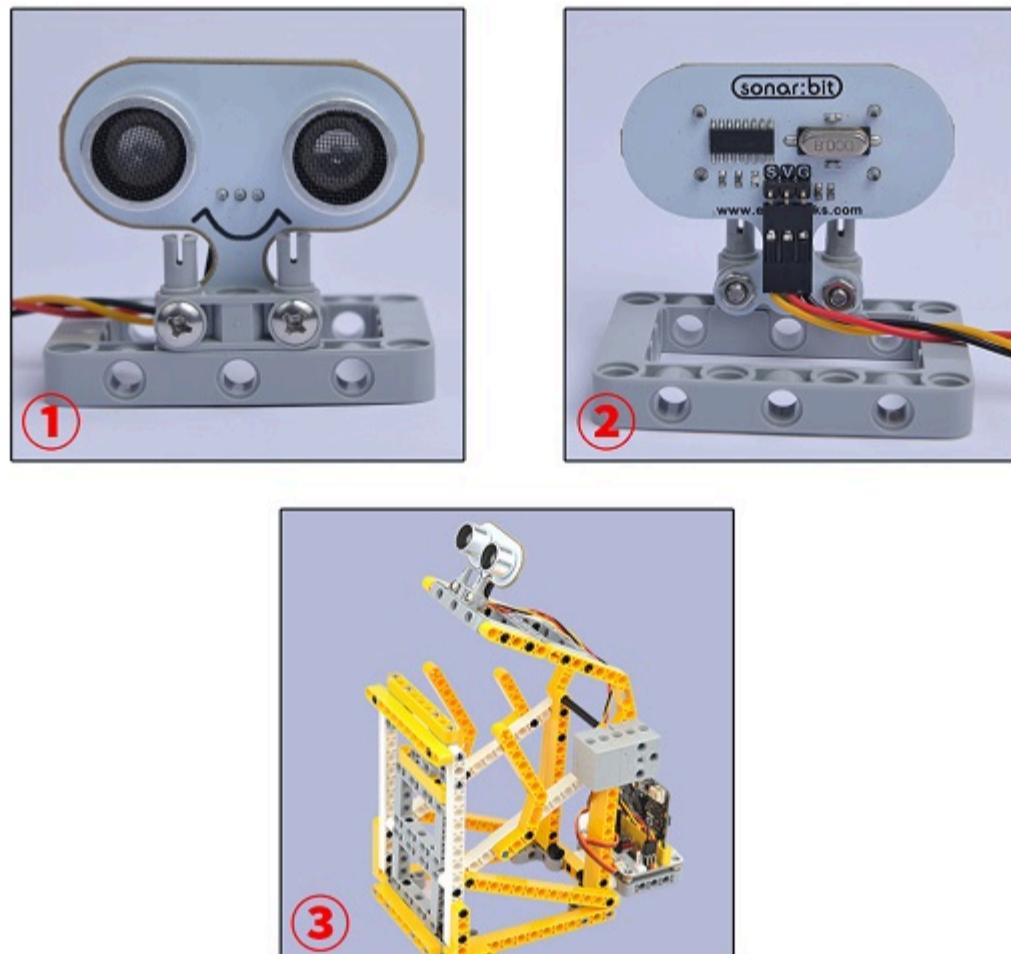
## 29.5. Installation Mthods of Hardwares
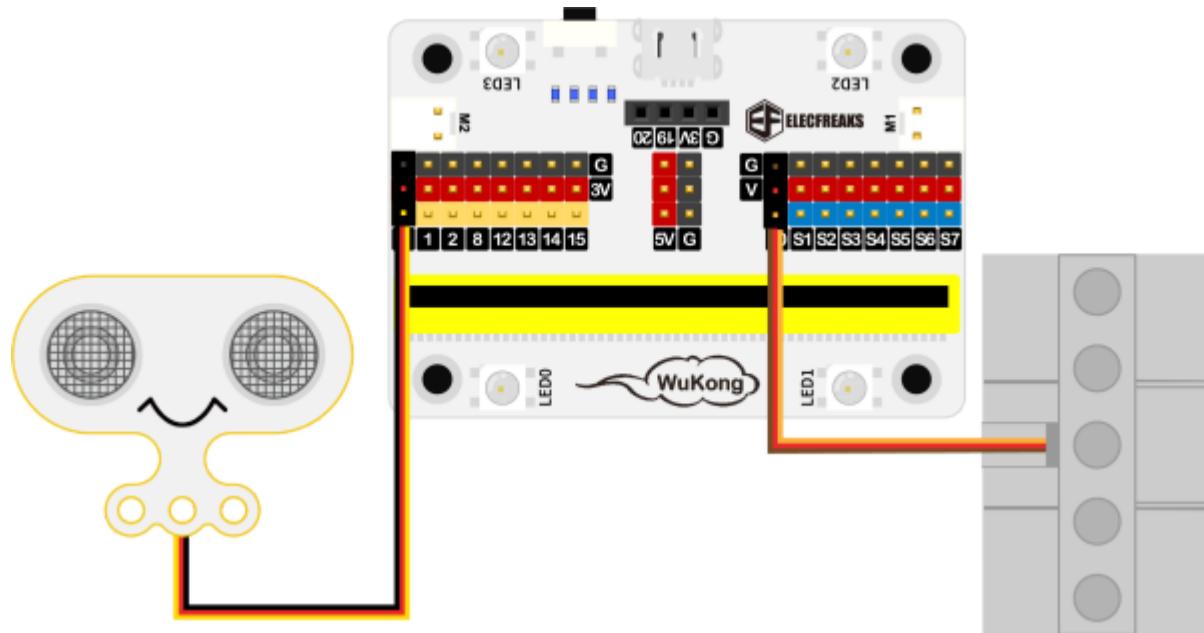
Install the sonar:bit with the bricks.



## 29.6. Hardware Connection

Connect a servo to S0 and a sonar:bit to P0 port on Wukong breakout board.
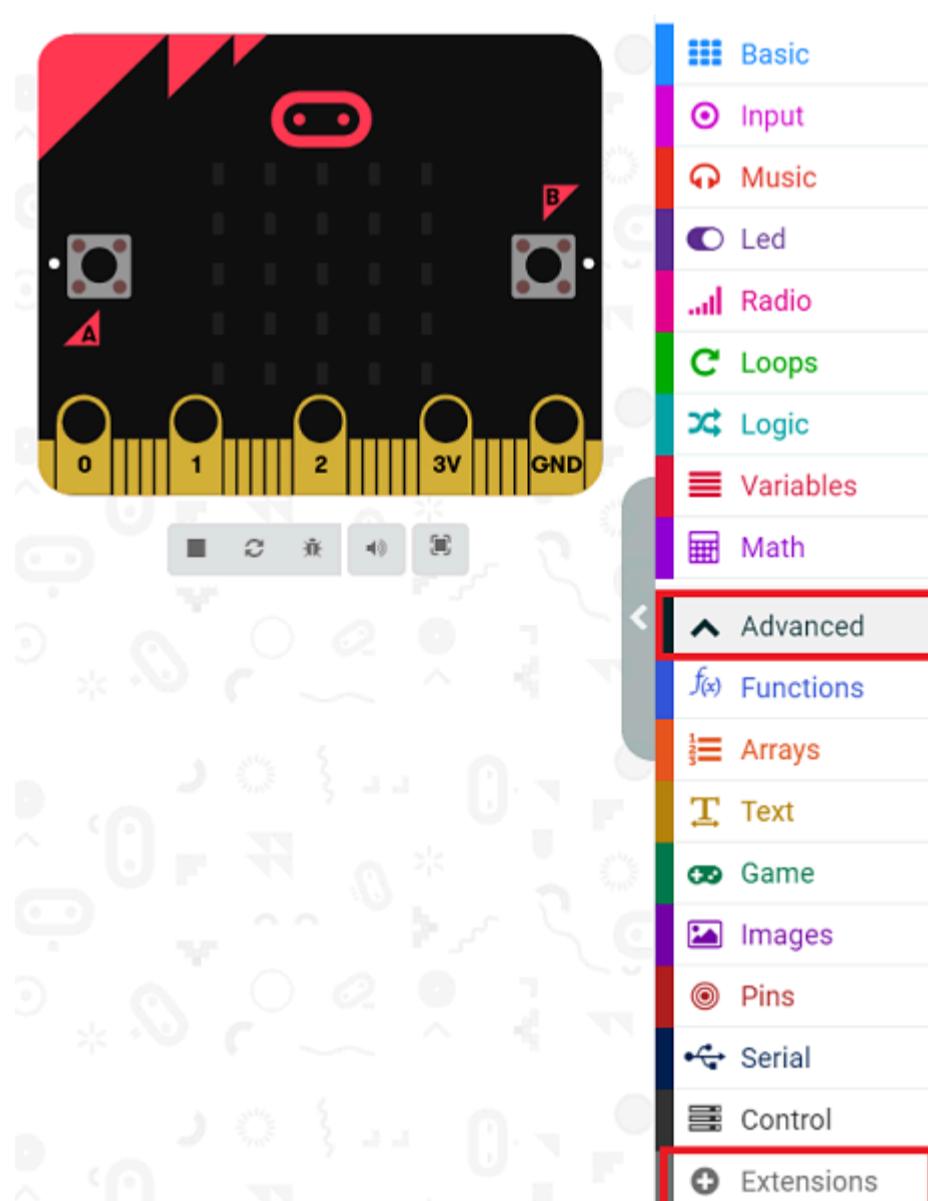
## 29.7. Software Platform

[MakeCode](MakeCode)
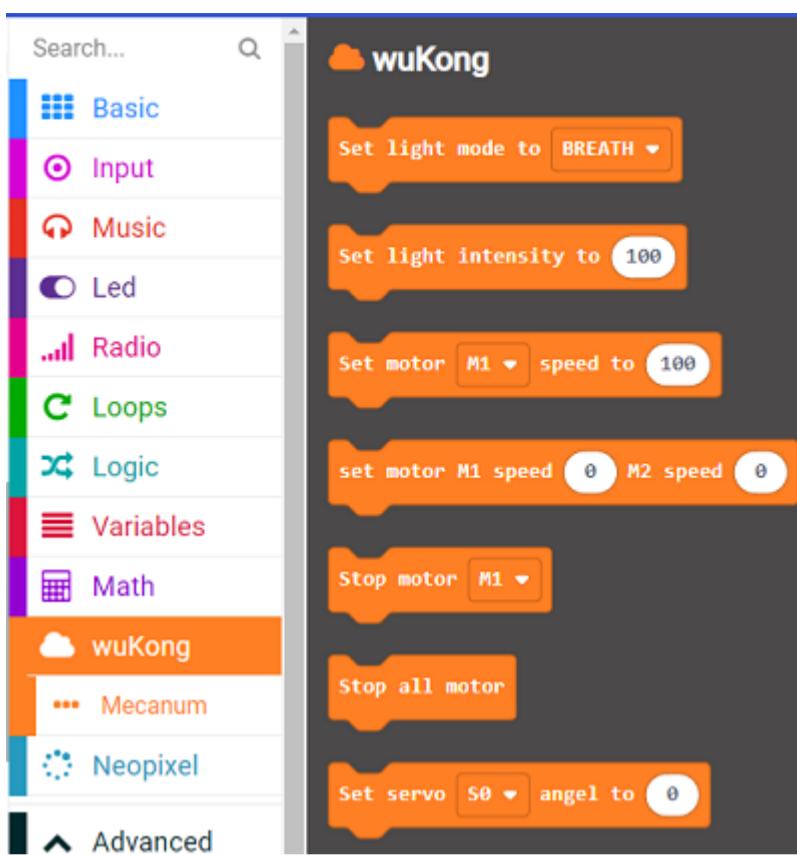
## 29.8. Coding

### Add extensions
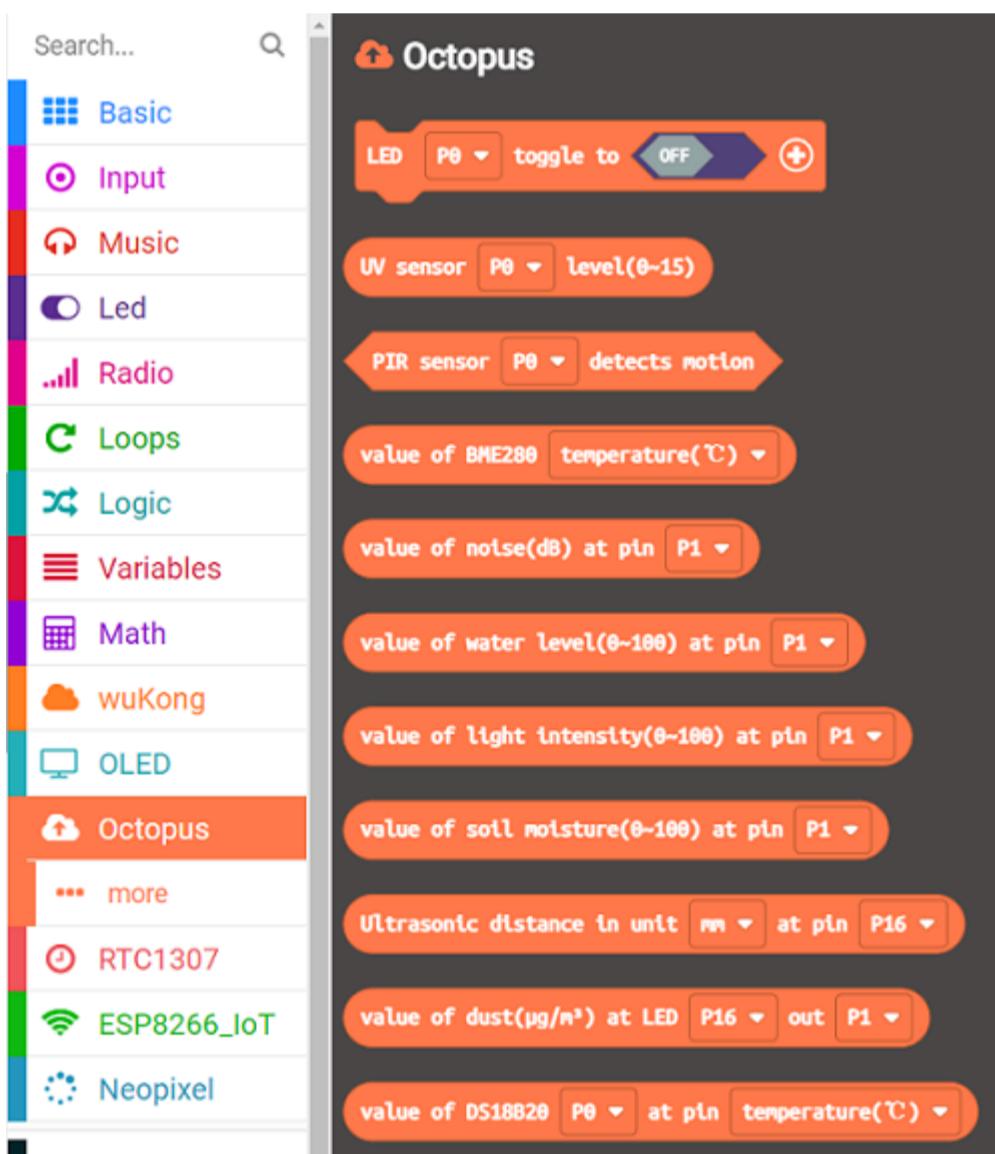
Click "Advanced" in the MakeCode to see more choices.
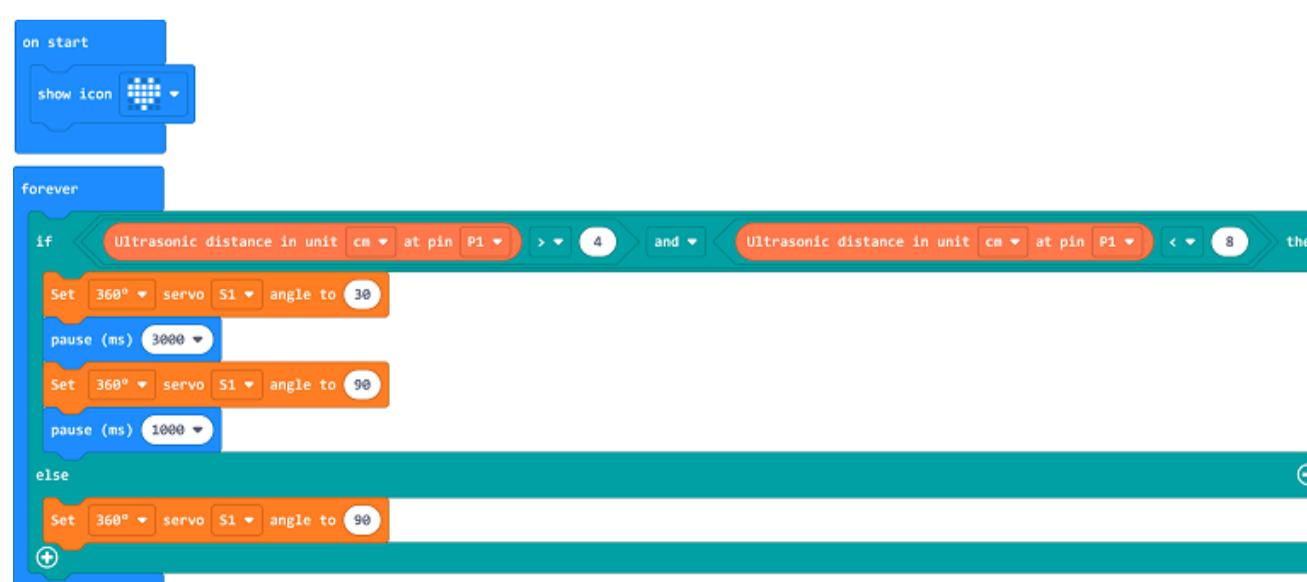


Search with Wukong in the dialogue box to download it.

Search with IOT:bit in the dialogue box to download it.



## Program



Link:[https://makecode.microbit.org/_XeMXzj7z3JFx](https://makecode.microbit.org/_XeMXzj7z3JFx)

## Result

When the micro:bit is powering on, it displays a heart icon, then the lid will automatically open when the ultrasonic sensor detects someone approaching, and it will automatically close after three seconds.

By ELECFREAKS Team