Case 04: Obstacles-avoidance Cars
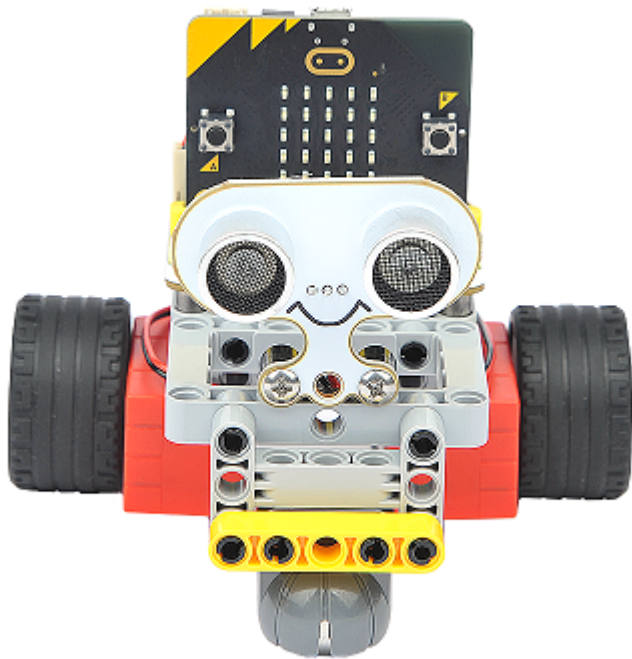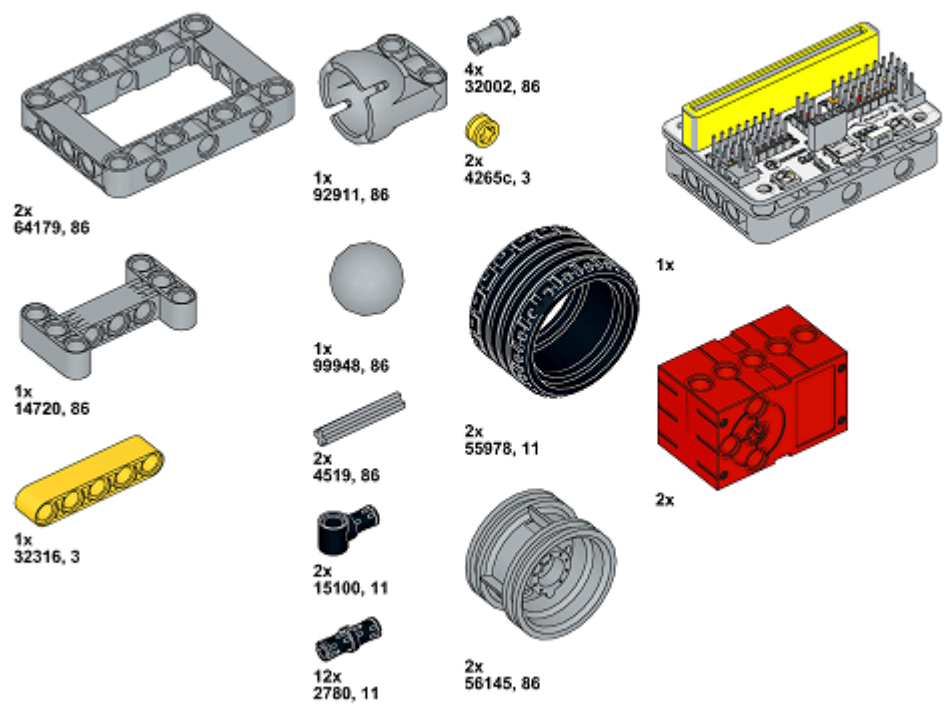
Contents

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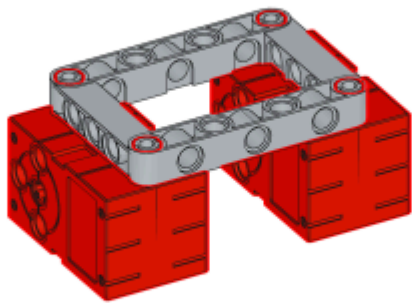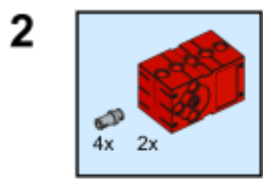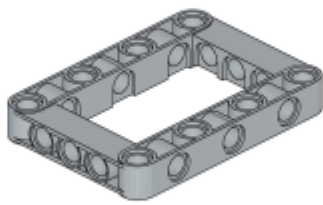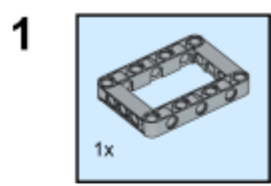
To make an obstacle-avoidance car.

6.2. Link

[micro:bit Wonder Building Kit](#)

6.3. Materials Required

Video link: https://youtu.be/jYkSCfRpj1Y

6.4. Bricks build-up

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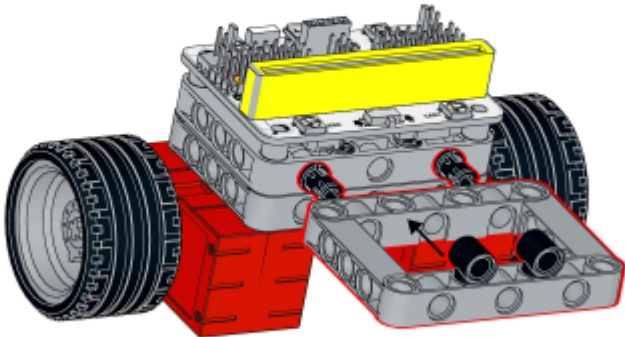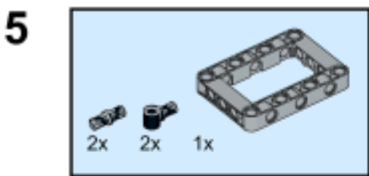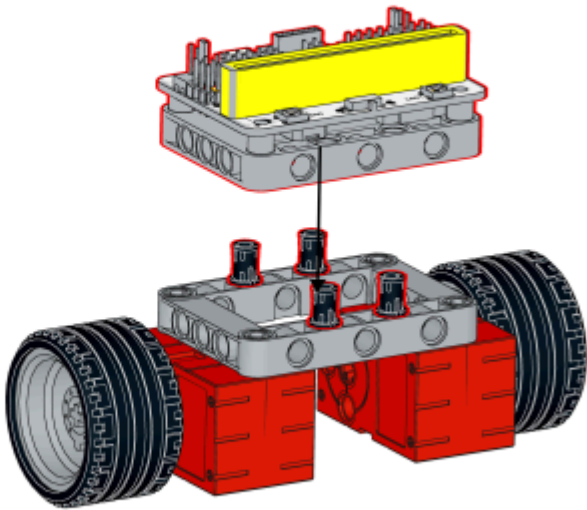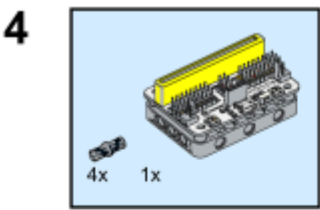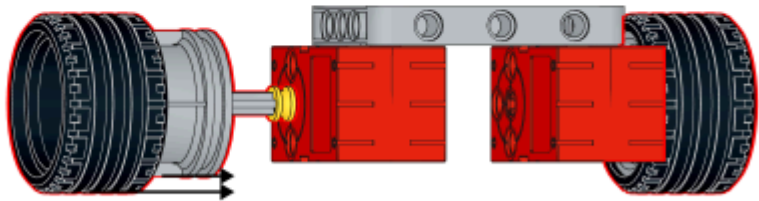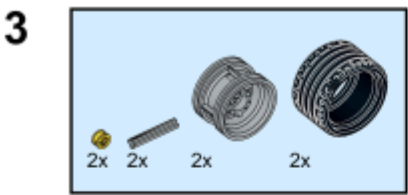
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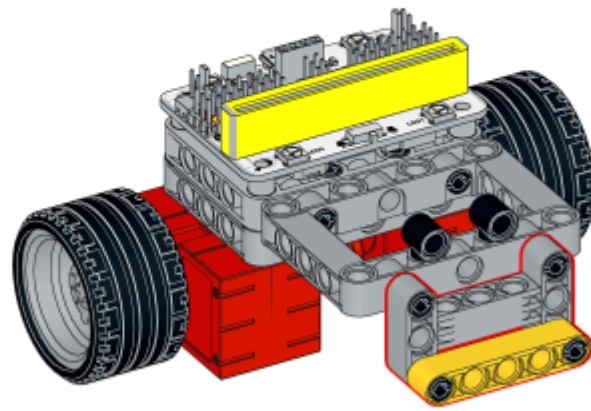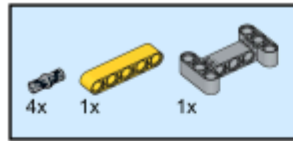
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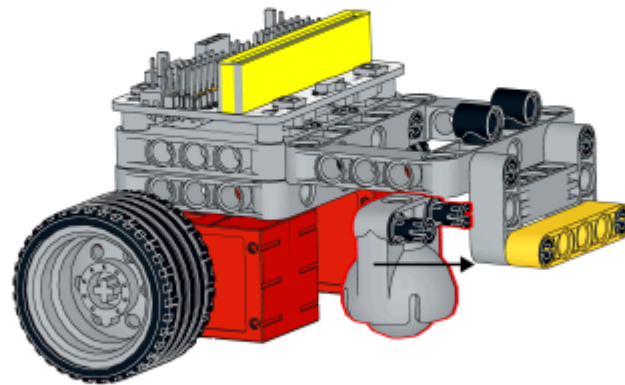
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6.5. Installation Mthods of Hardwares

Install the sonar:bit with the bricks.

Sensor Connection Diagram

6.6. Hardware Connection

Connect two motors to M1, M2, and the sonar:bit to P1 port on Wukong breakout board.

6.7. Software Platform

MakeCode

6.8. Coding

Add extensions

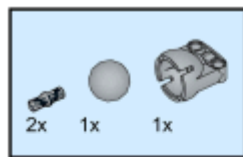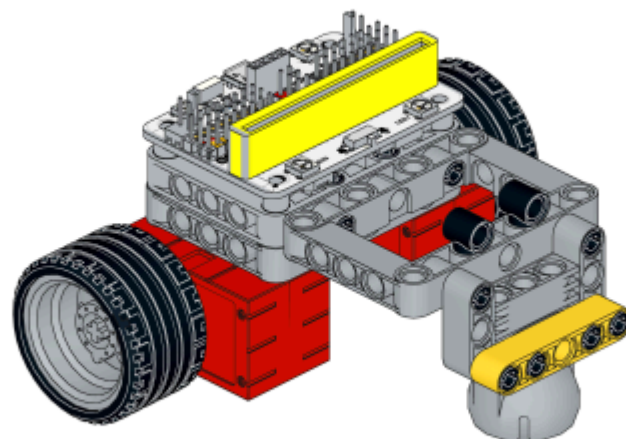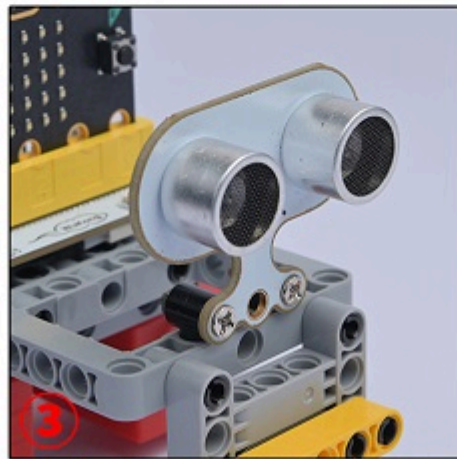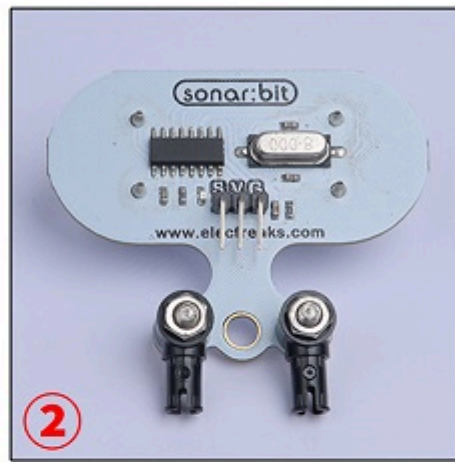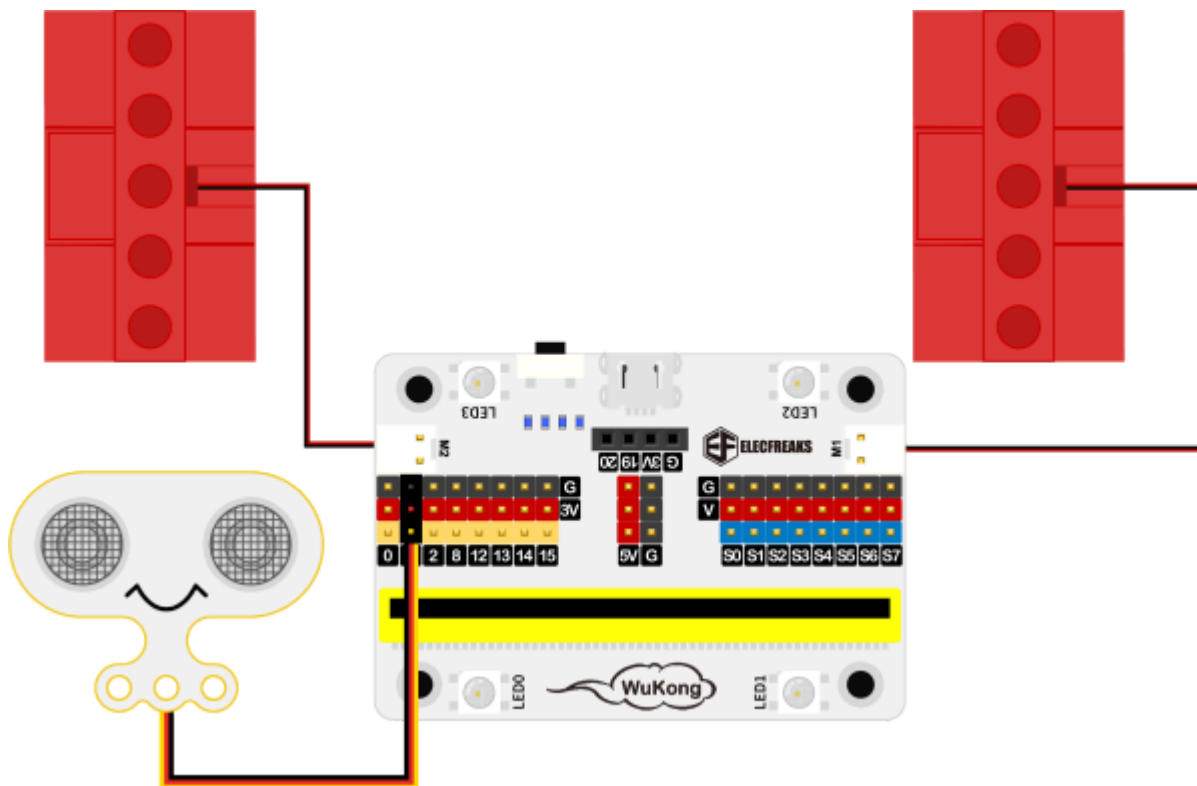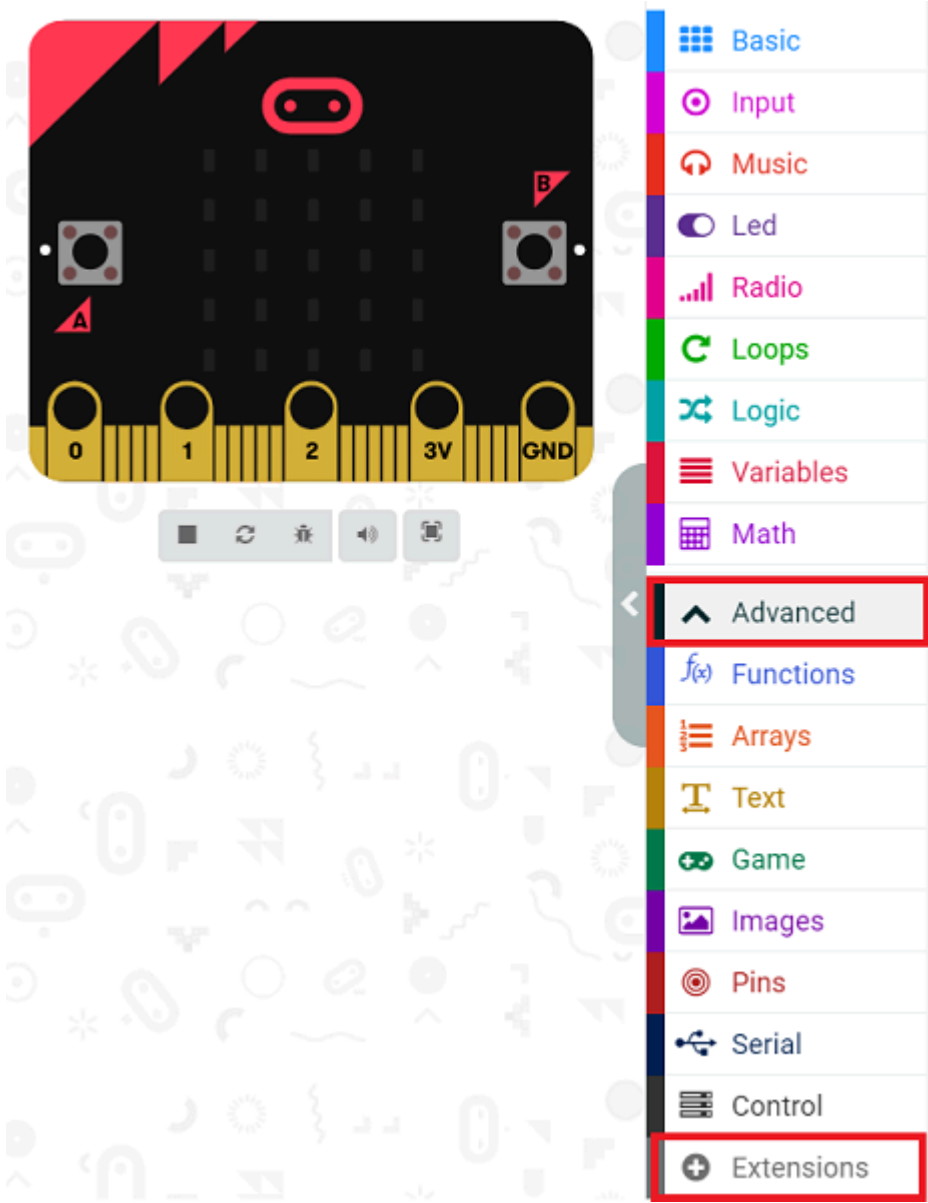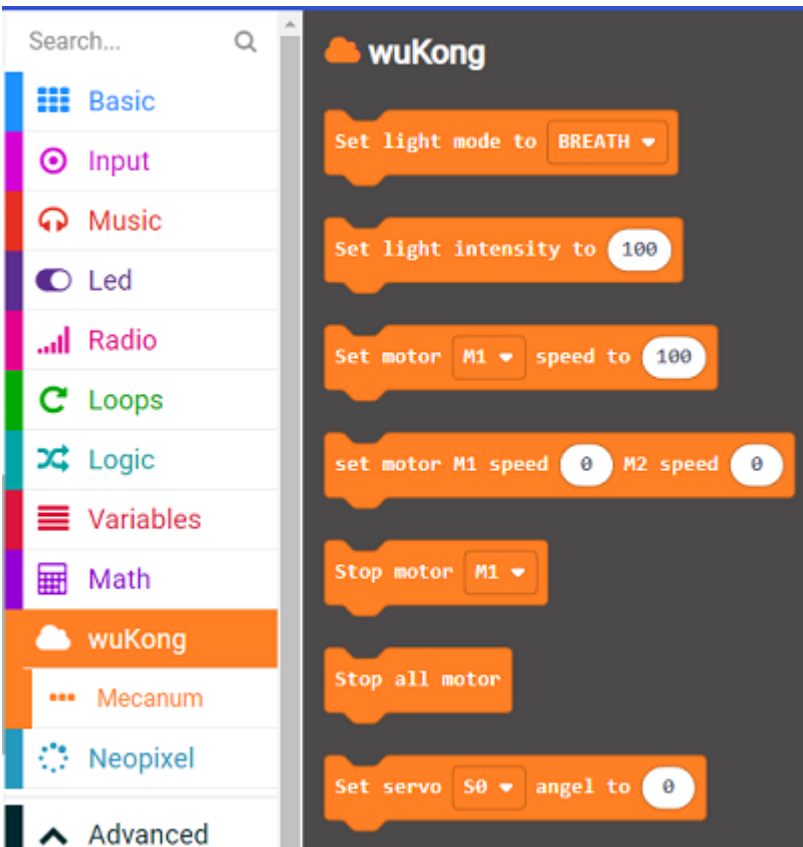Click "Advanced" in the MakeCode to see more choices.

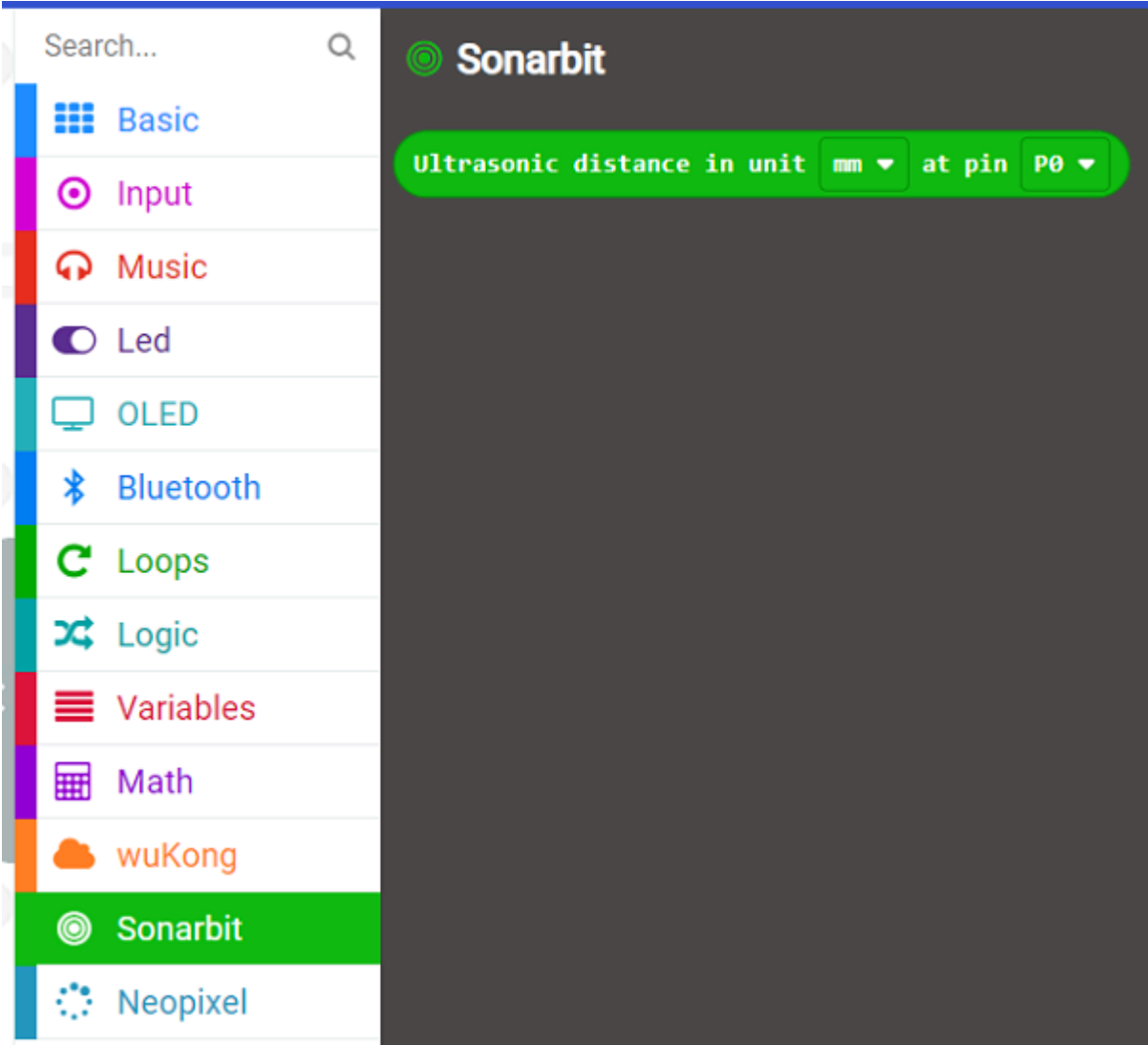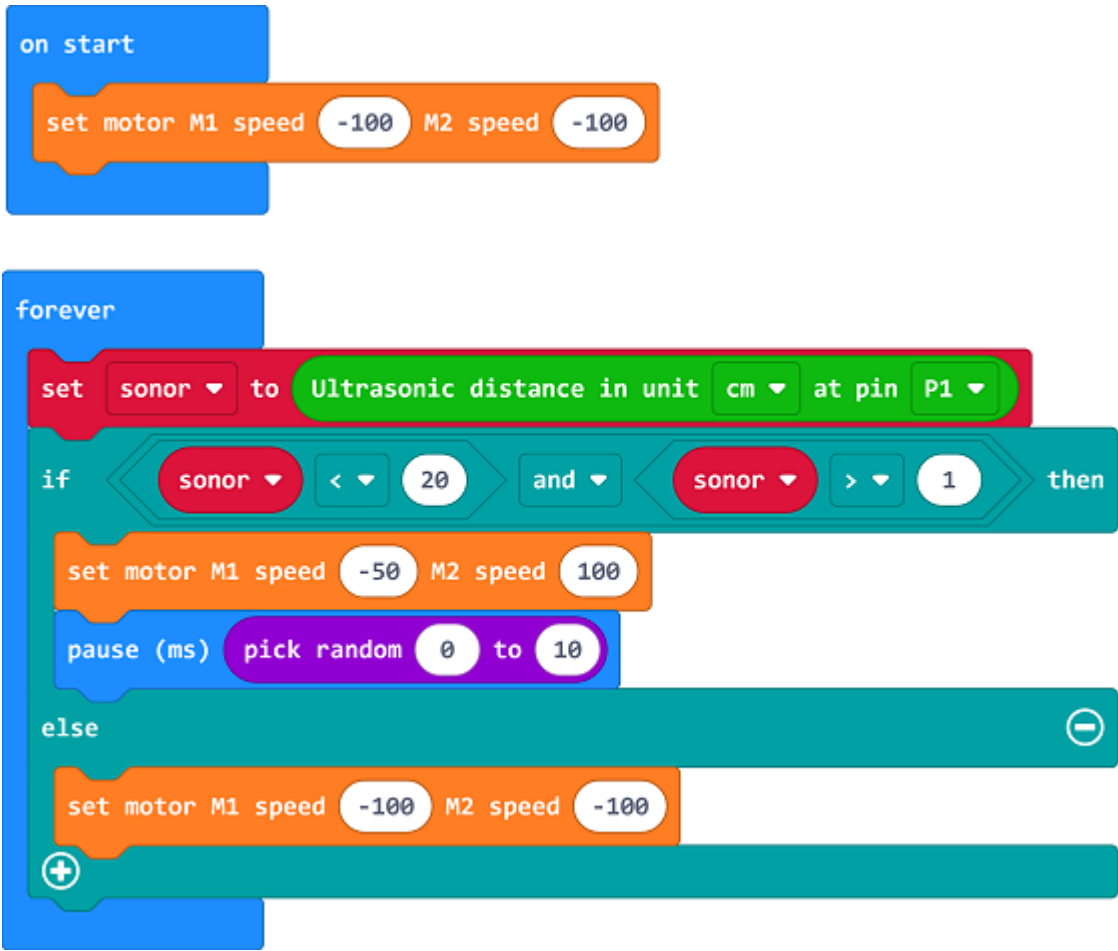Search with Wukong in the dialogue box to download it.

Search with https://github.com/elecfreaks/pxt-sonarbit in the dialogue box to add the sonar:bit extension.

Program

Link:https://makecode.microbit.org/_7K4bgpCKv2WJ

6.9. Result

While on start, the car moves forward at the full speed and it turns right if it detects any obstacles within the scope of 20cm, and then it keeps moving forward.

By ELECFREAKS Team

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