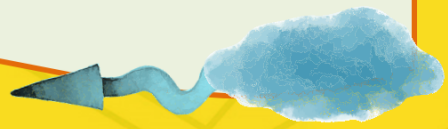
Give The Robot Vision

Target

- Complete the robot design and assembly according to the competition requirements.
- Learn how to install the grayscale sensor.
- Learn to use the grayscale sensor to detect obstacles.
- Learn to use the grayscale sensor to detect objects.

01 Assembly



Assembly

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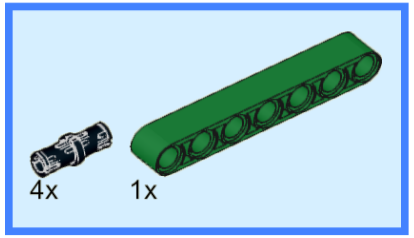

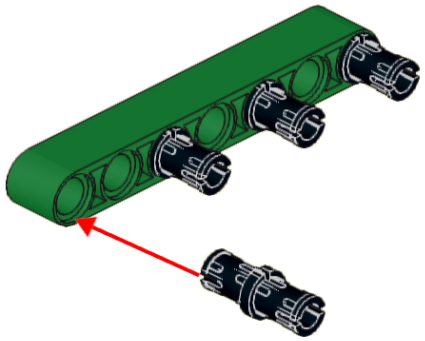

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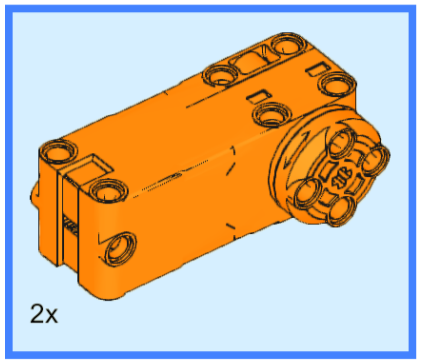

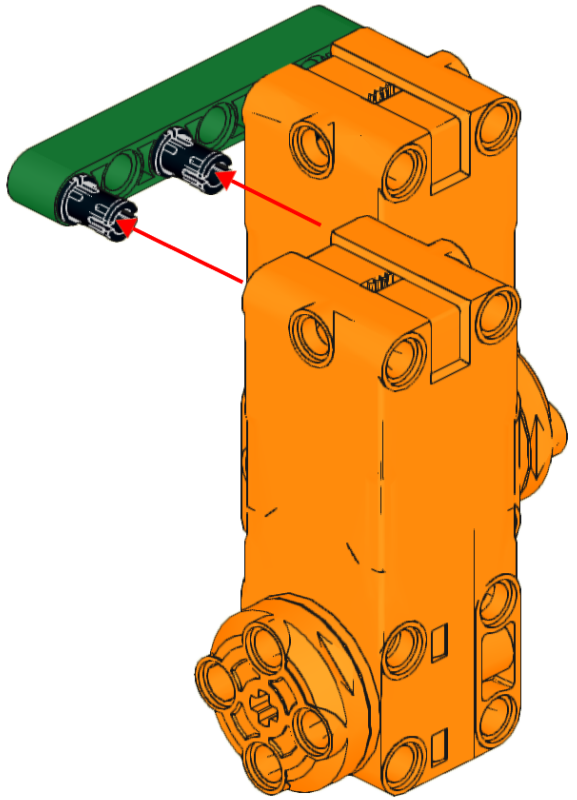

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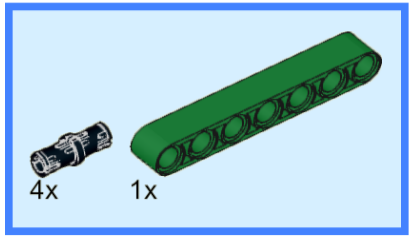

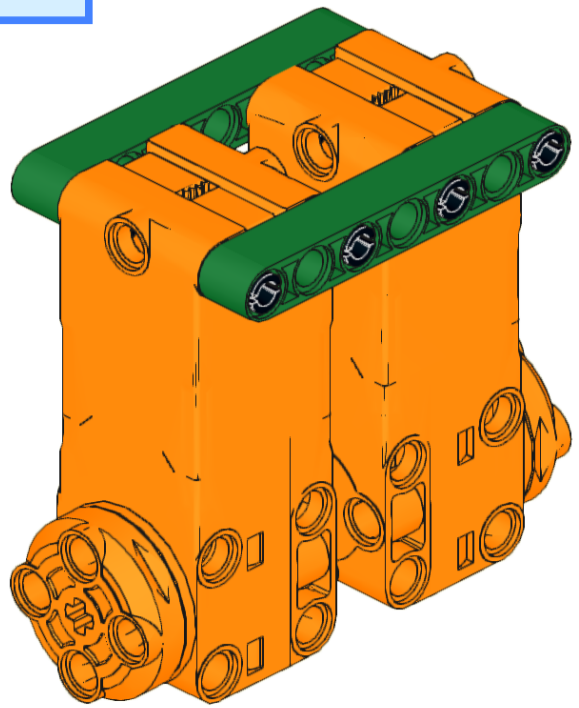

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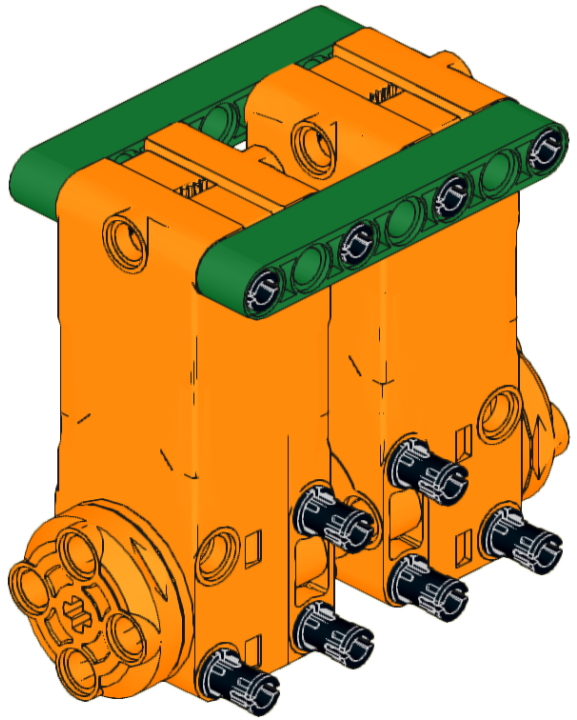

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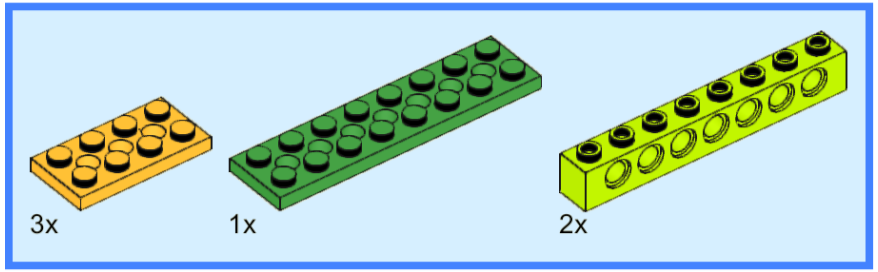

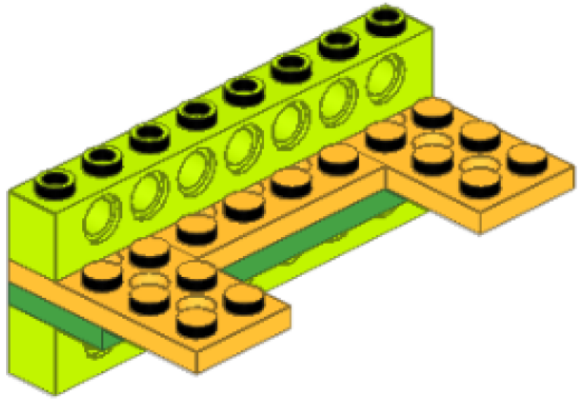

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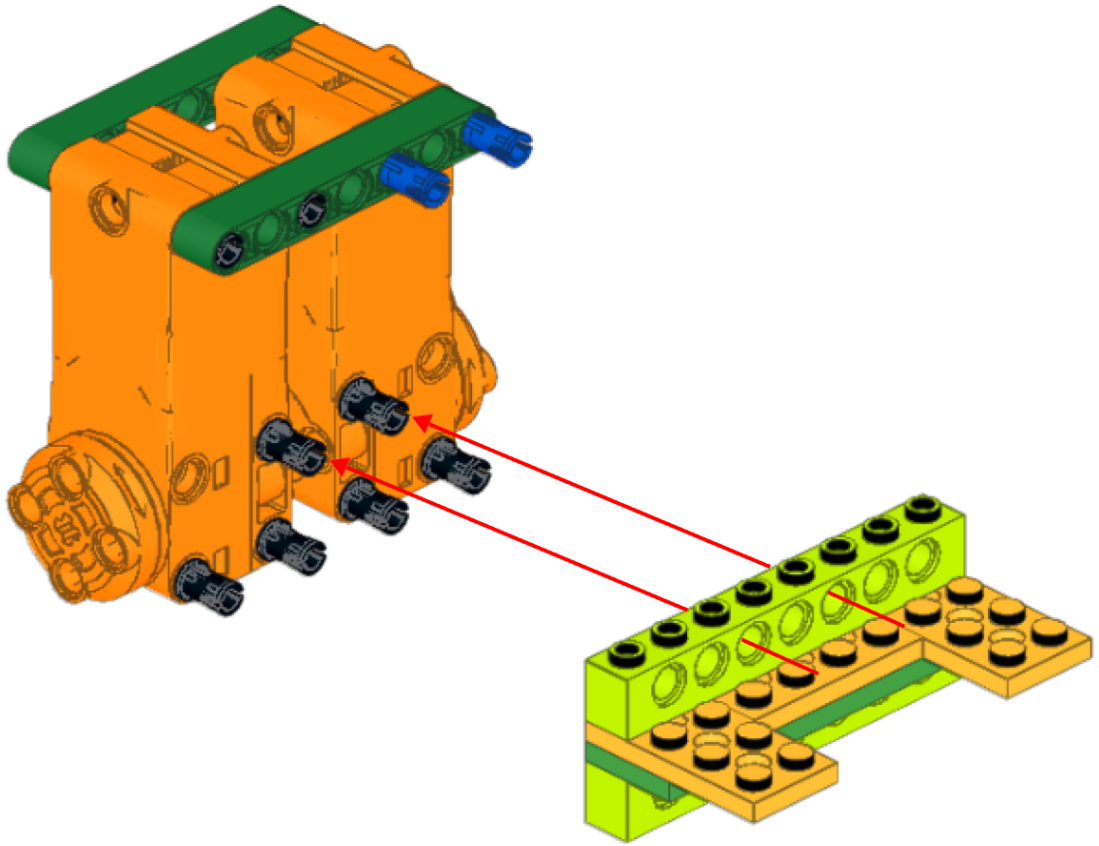

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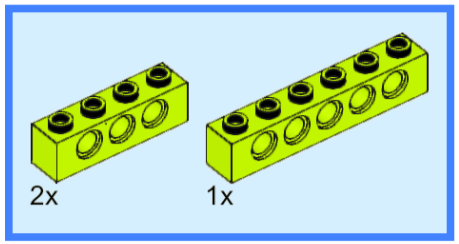

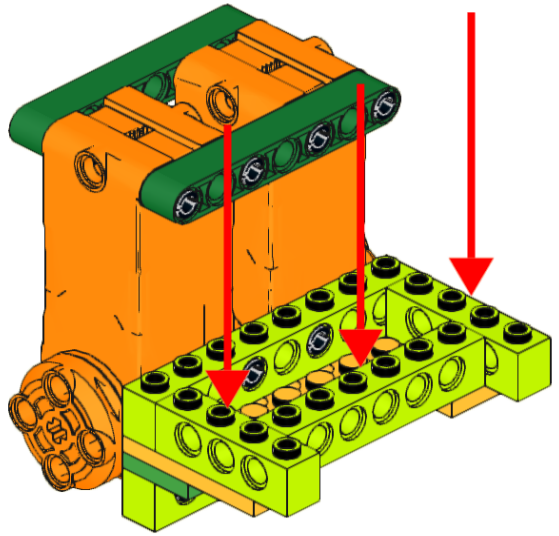

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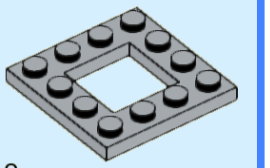

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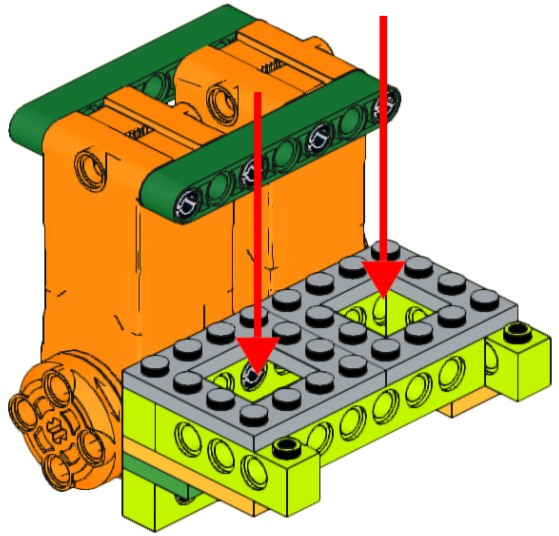

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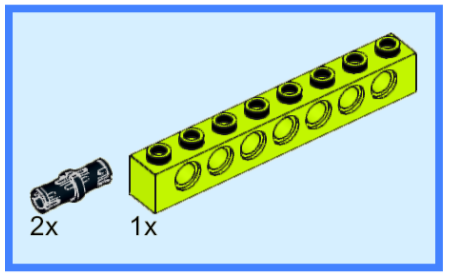

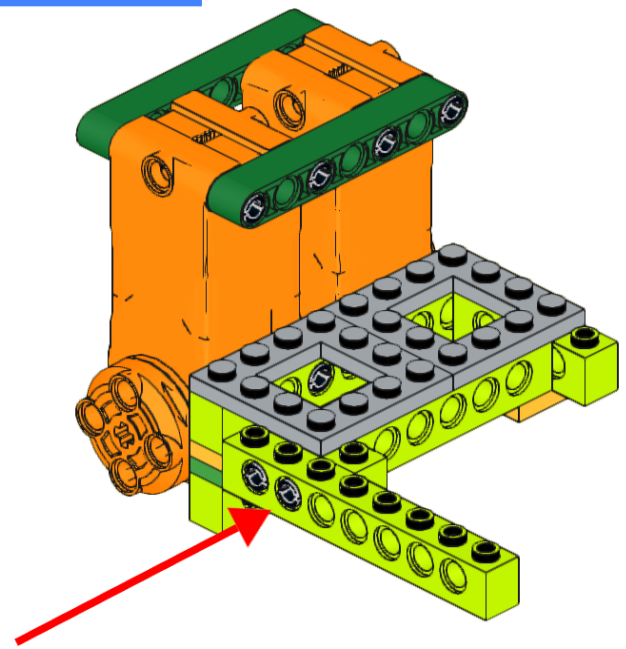

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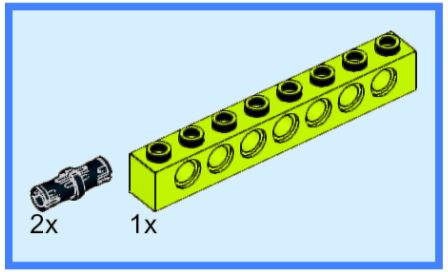

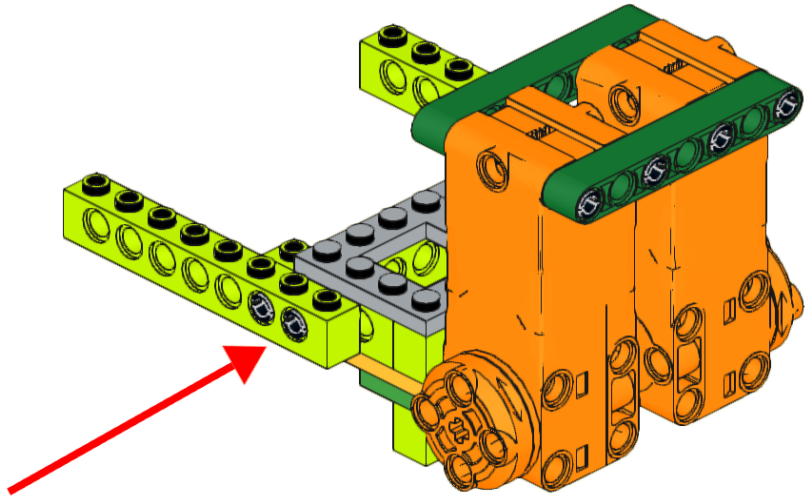

Assembly

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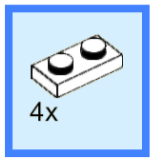

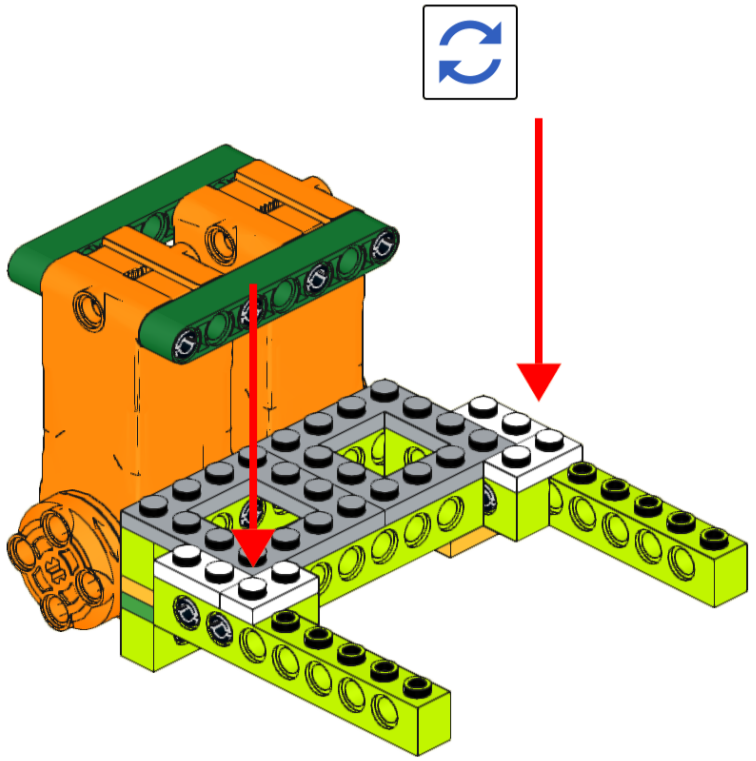

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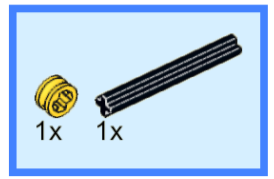

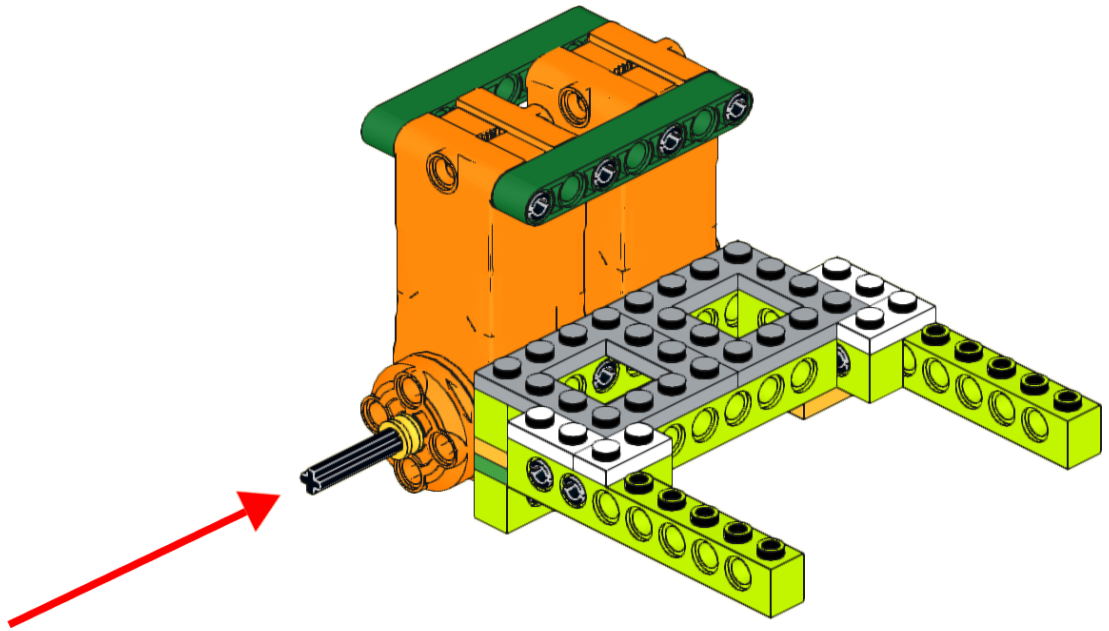

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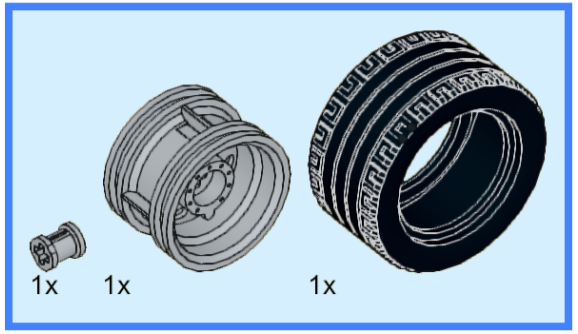

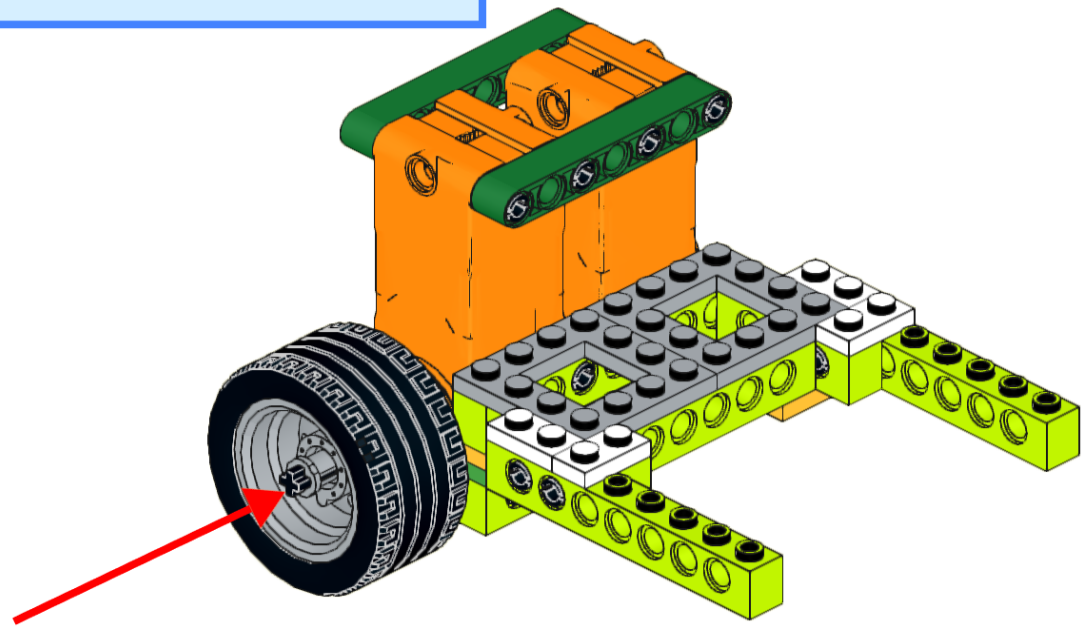

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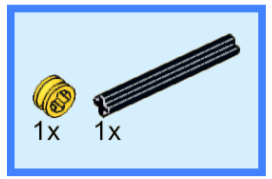

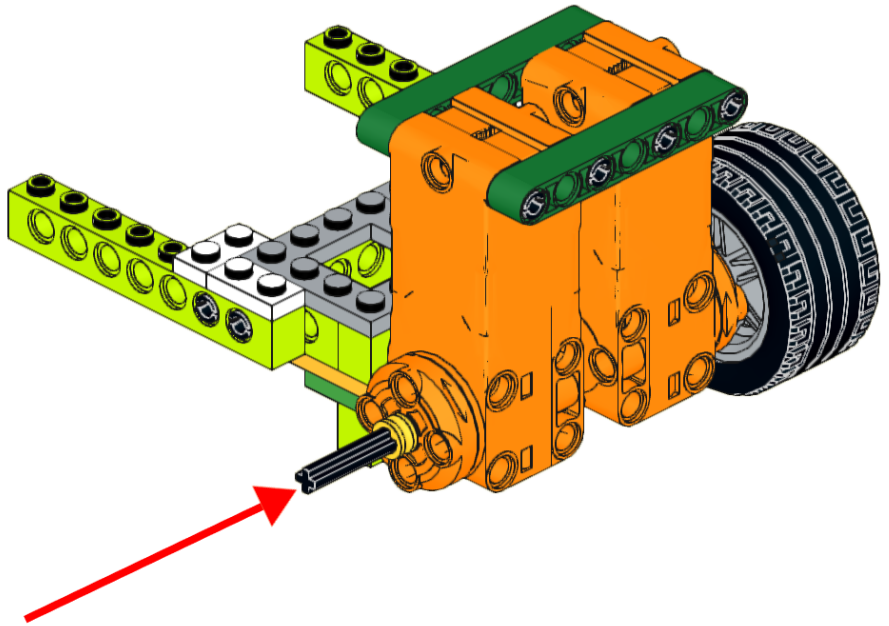

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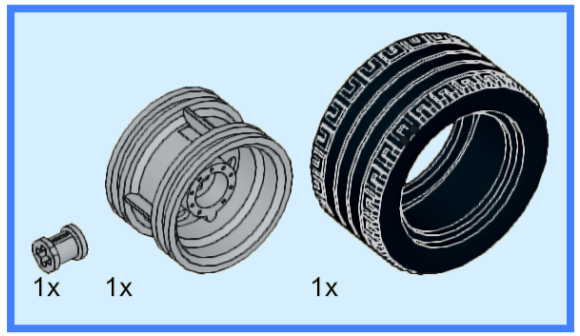

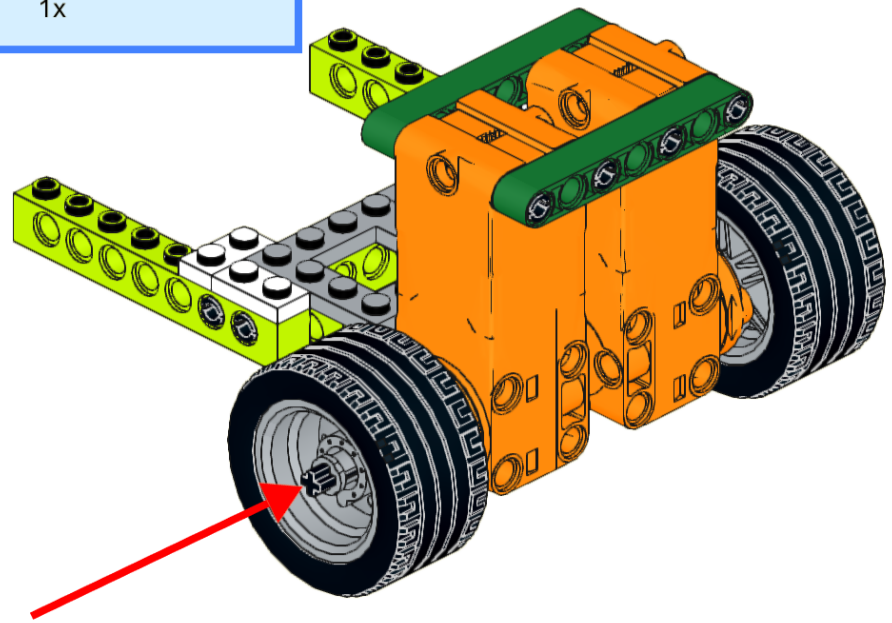

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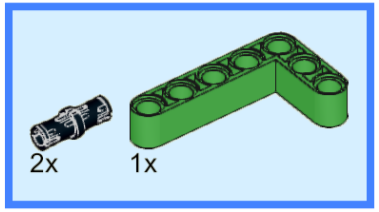

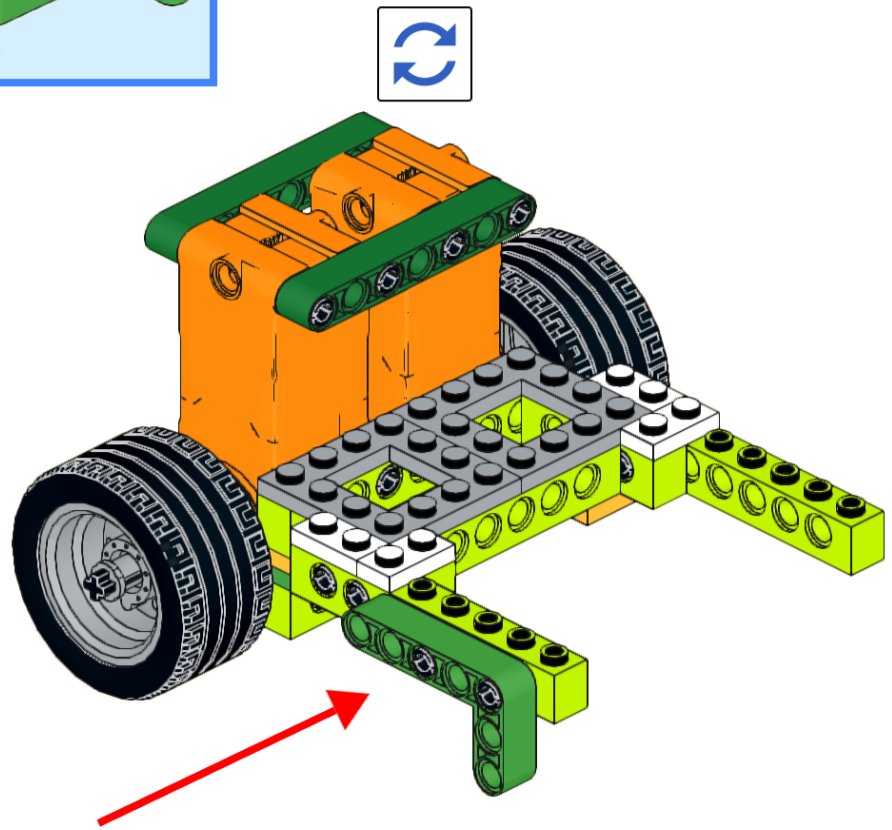

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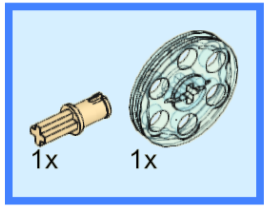

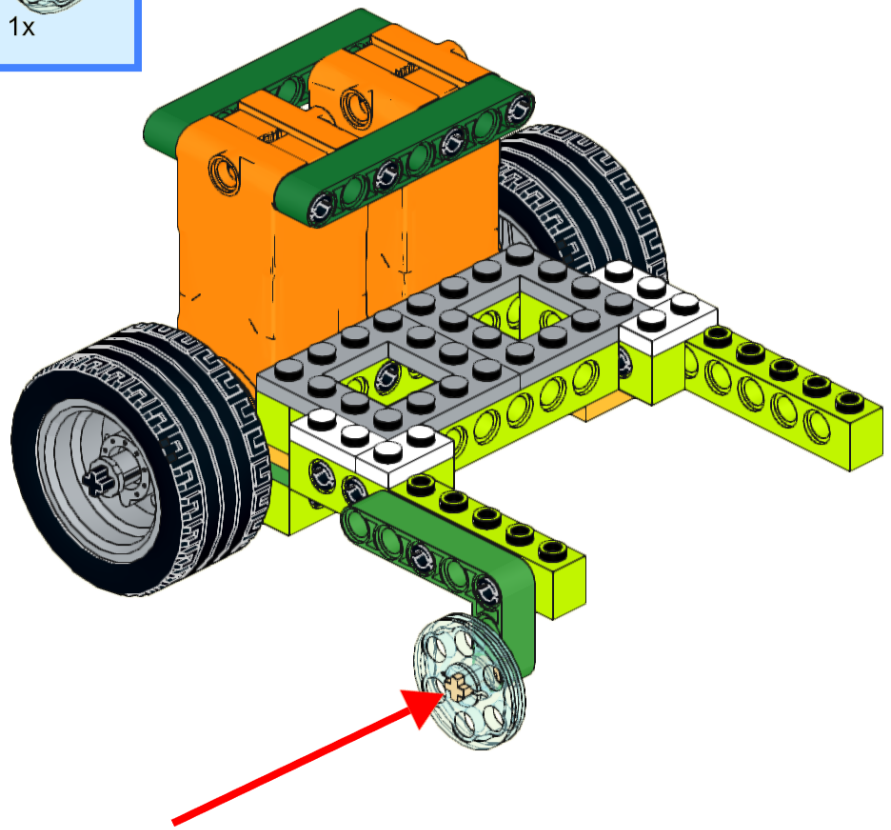

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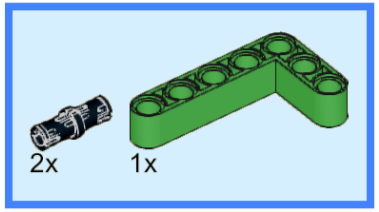

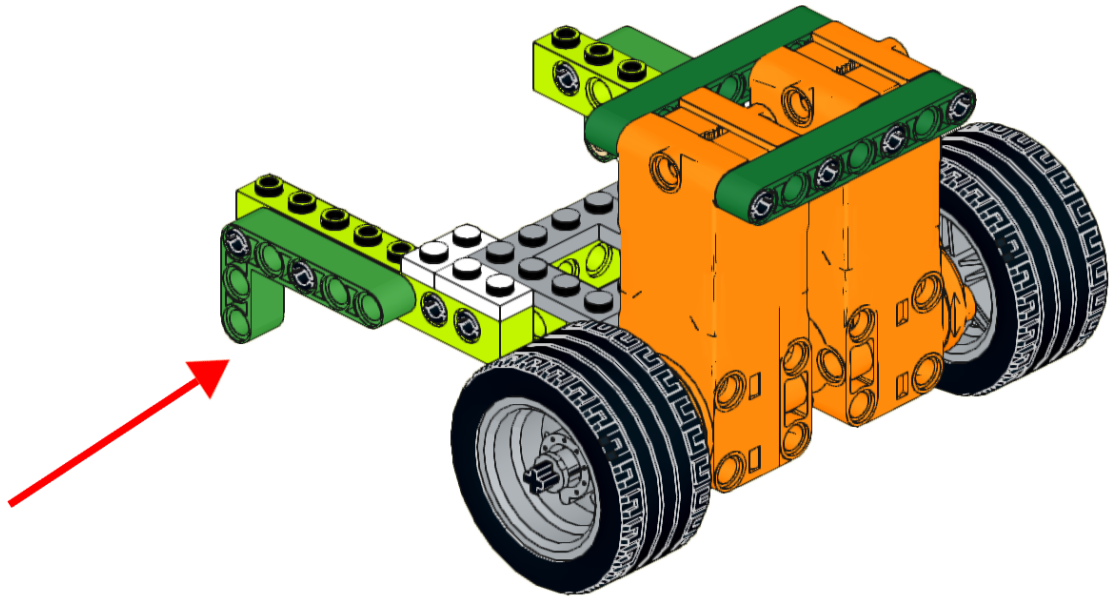

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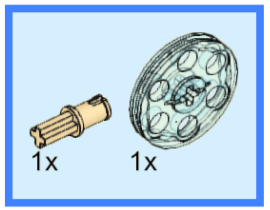

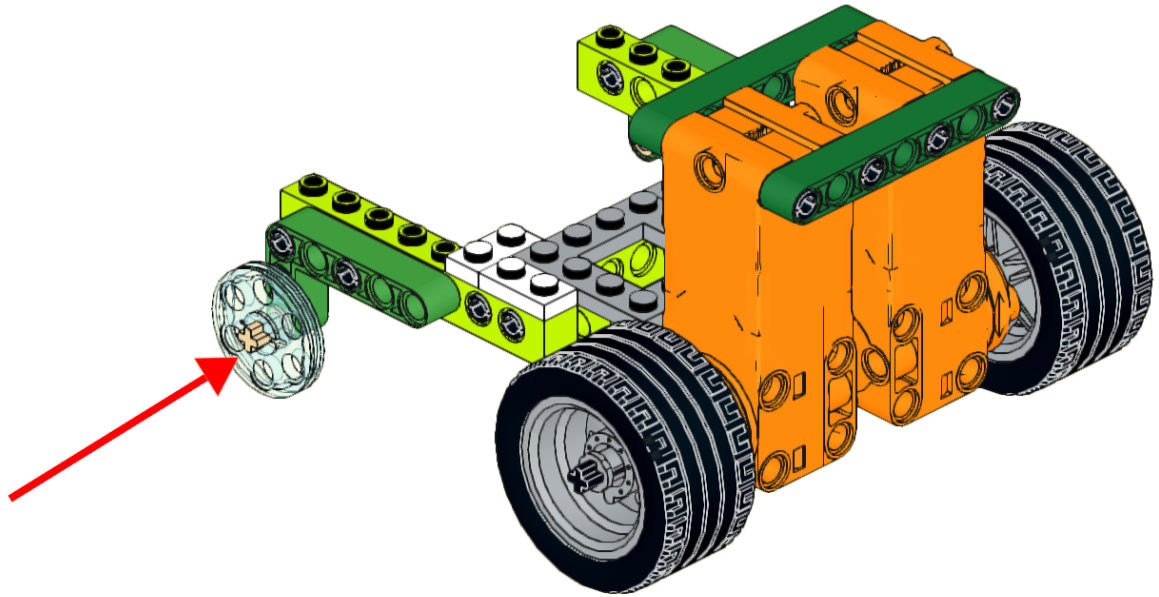

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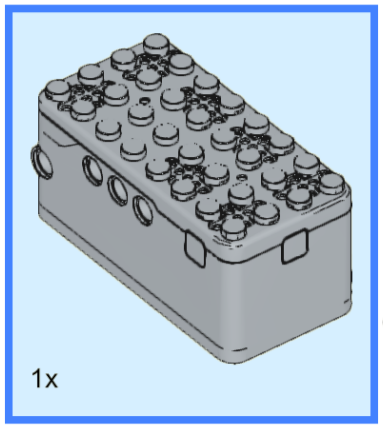

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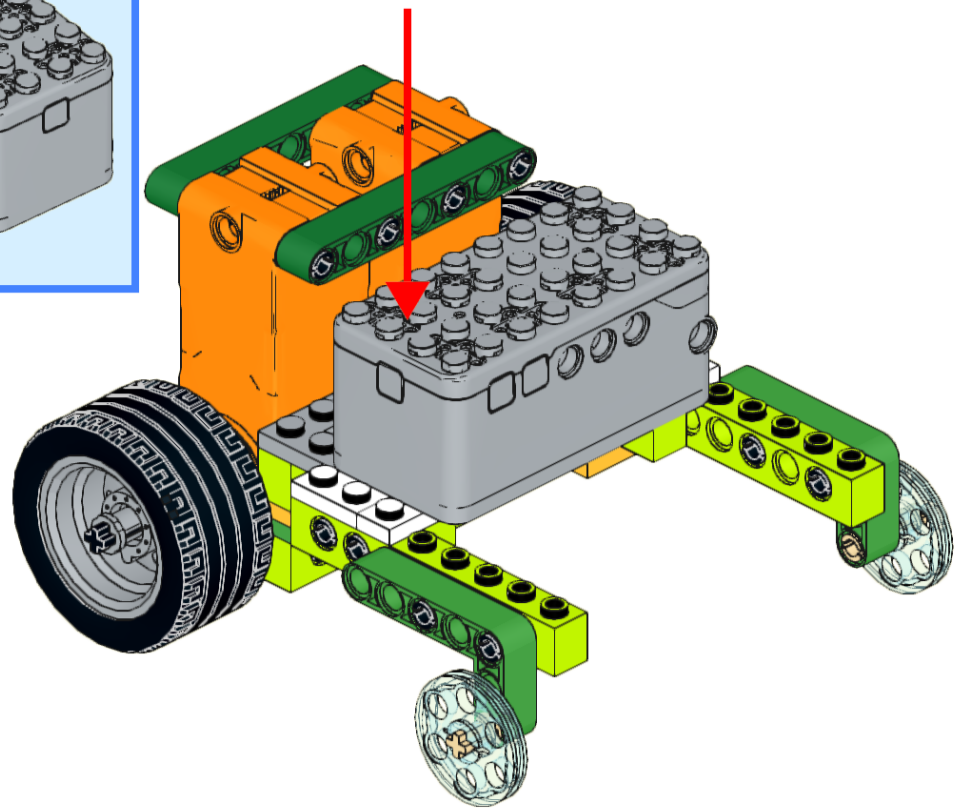

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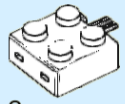

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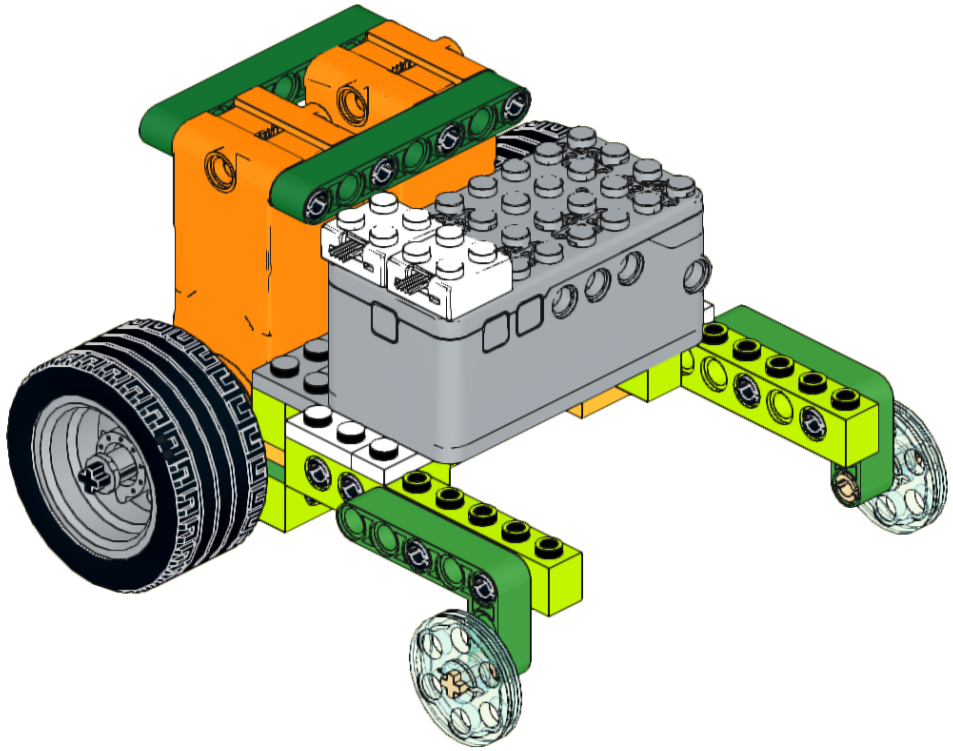

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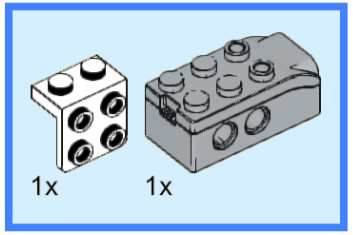

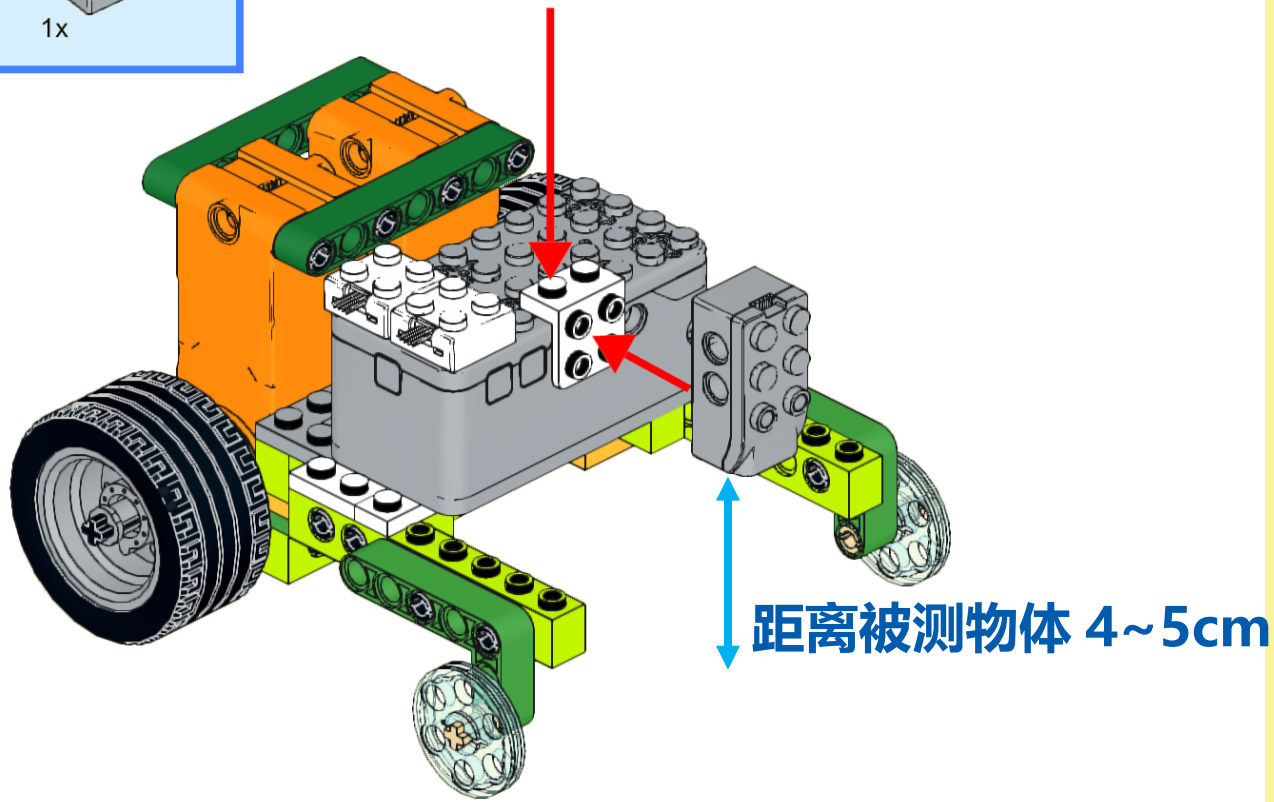

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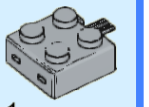

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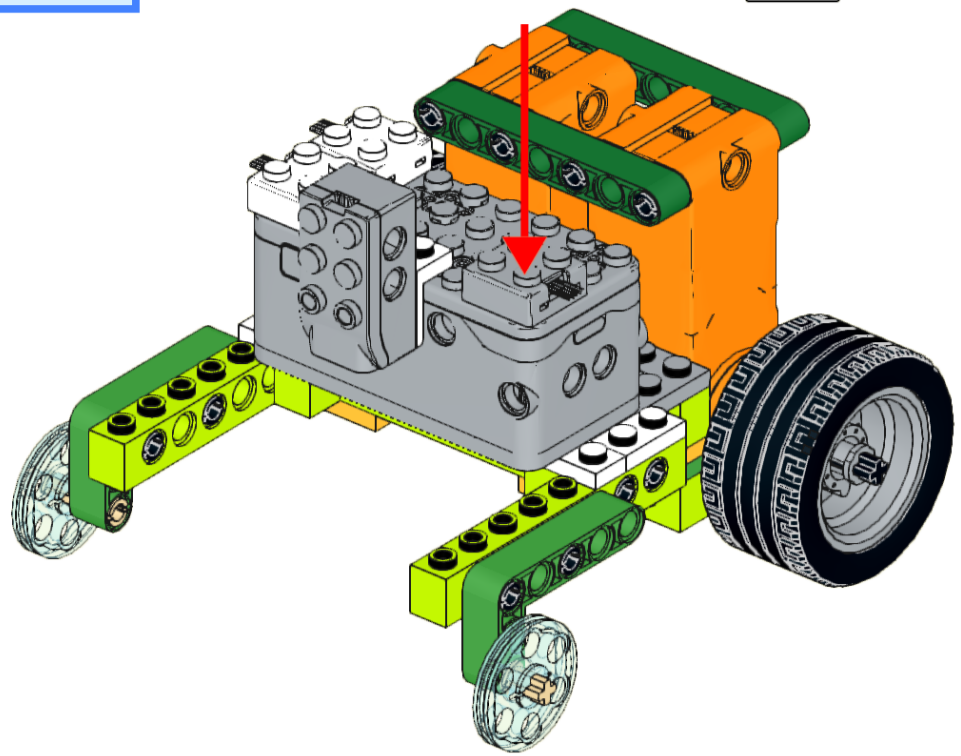
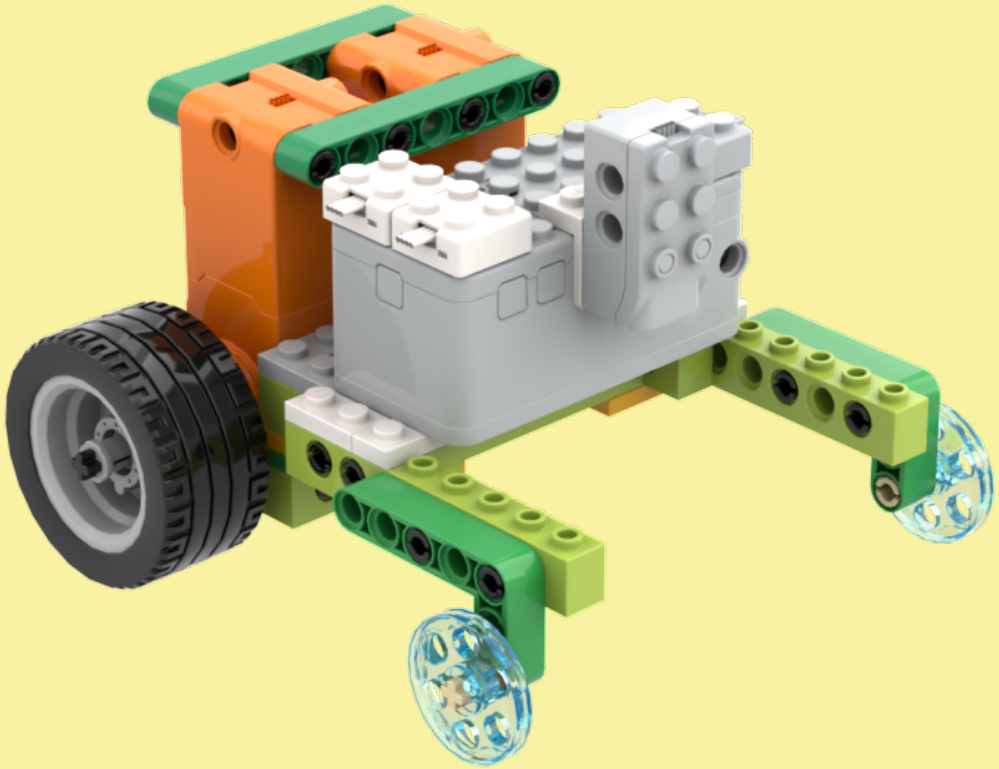
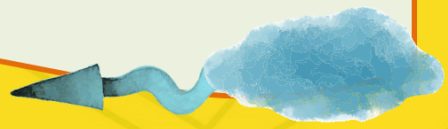


Assembly



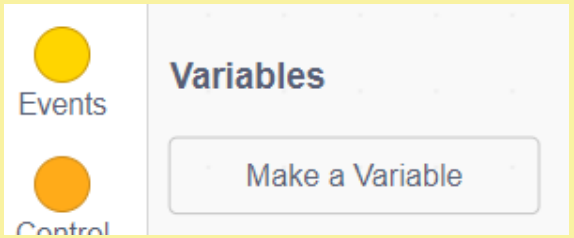
02 Task

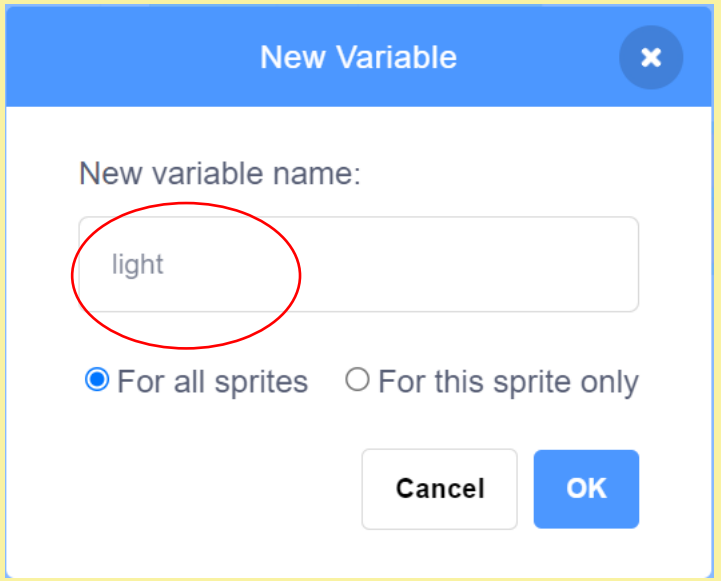


Coding Technique 1

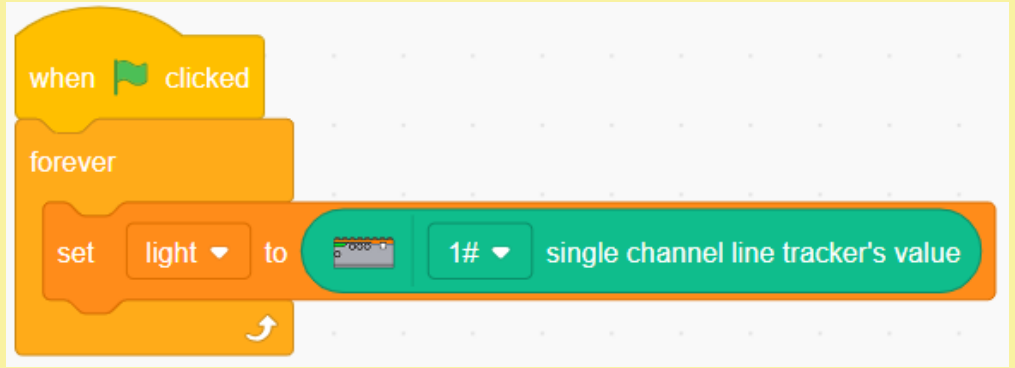
Using Variables and Viewing Sensor Values

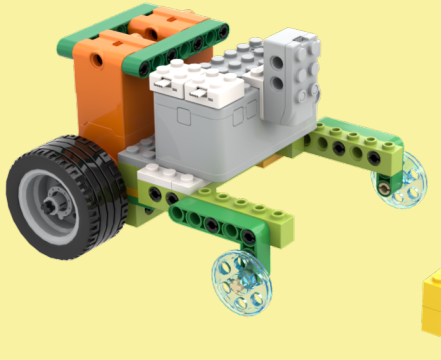
Note: Variable names should use only English letters.

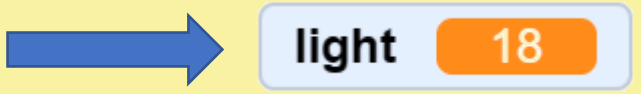




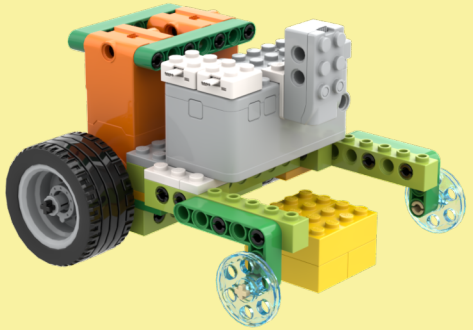
Coding Technique 1





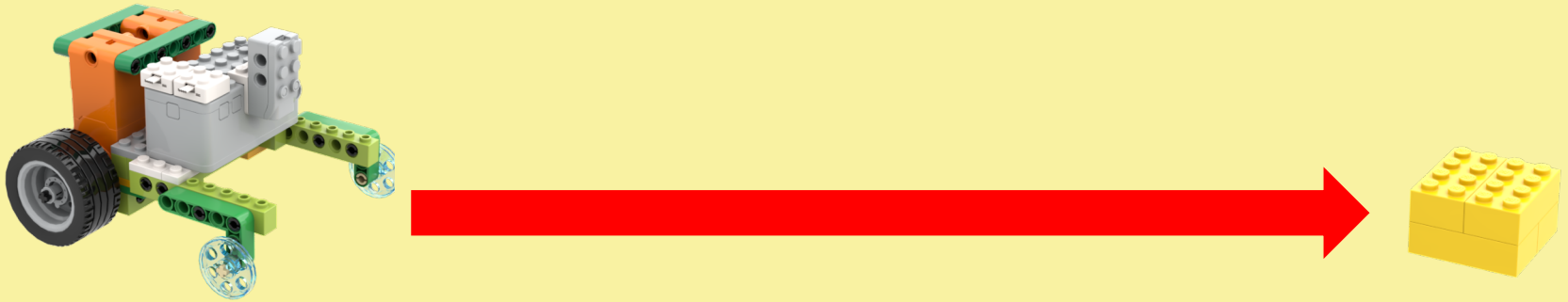


Pay close attention to the difference between detecting an item and not detecting an item.



Task

Task 1 : Stop after retrieving the item.

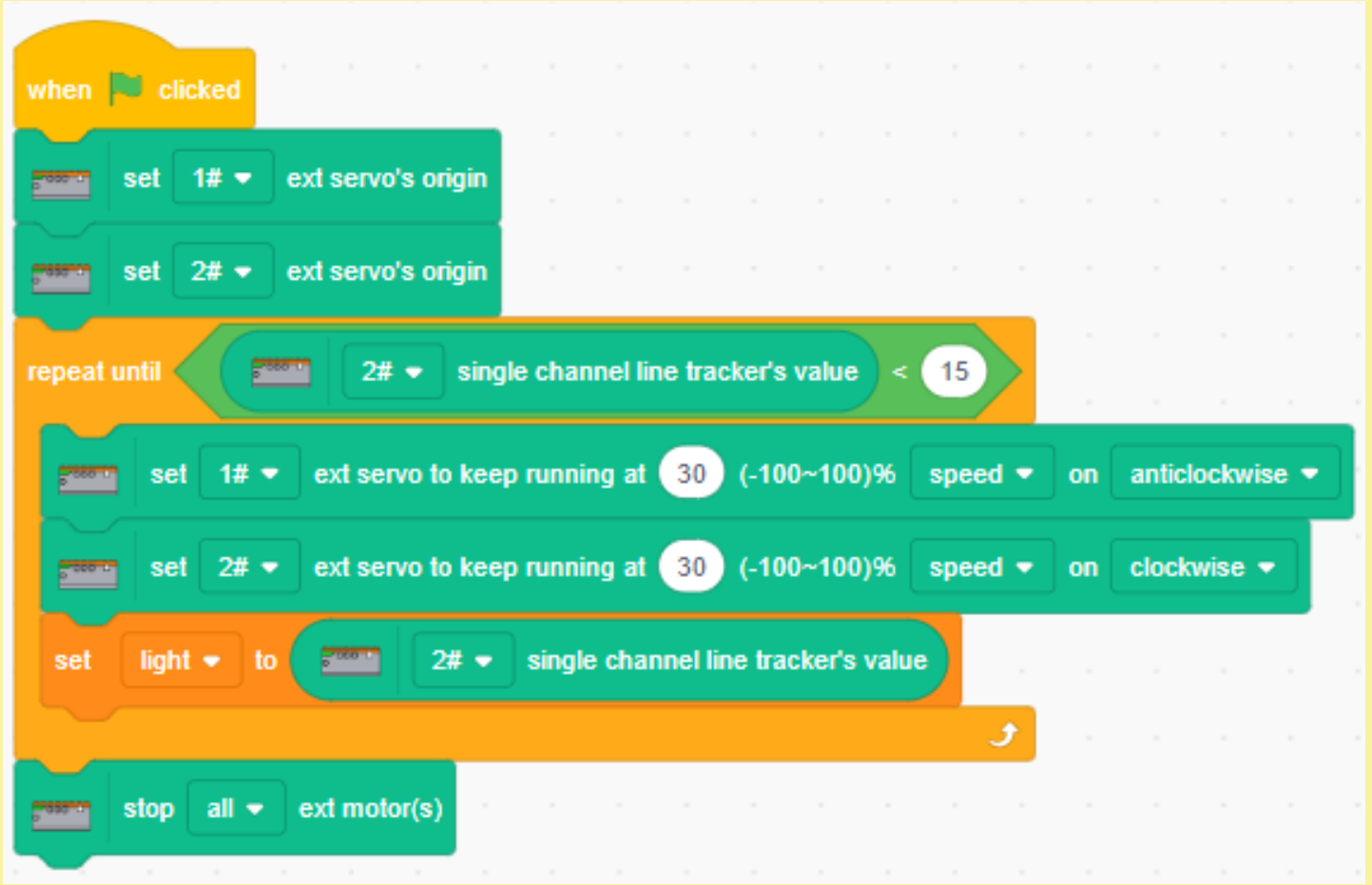


Task

Referrable Program

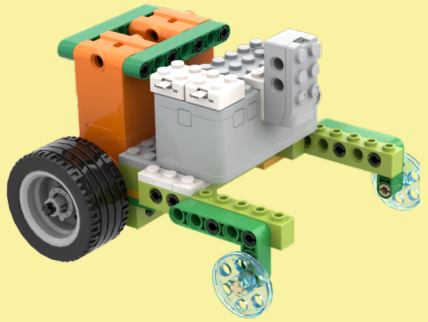
Using the "repeat until" control block is to synchronize the display of the sensor values.

A simpler approach is to use the "wait until" control block directly.



Task

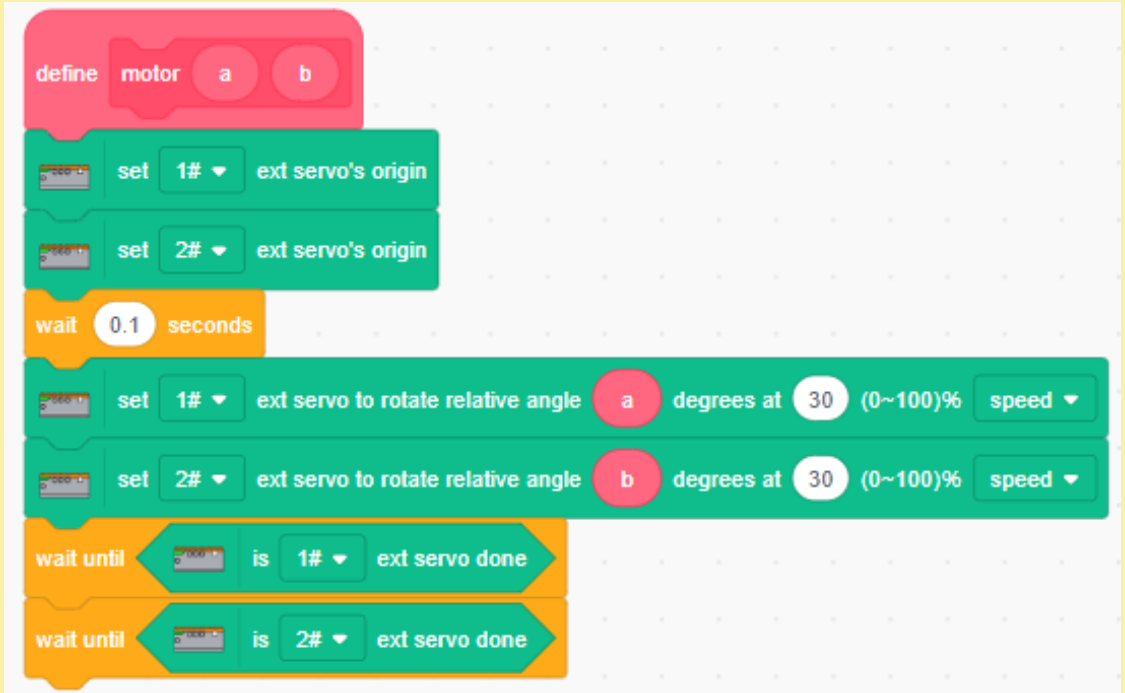
Task 2 : After retrieving the item, carry it to the designated location.

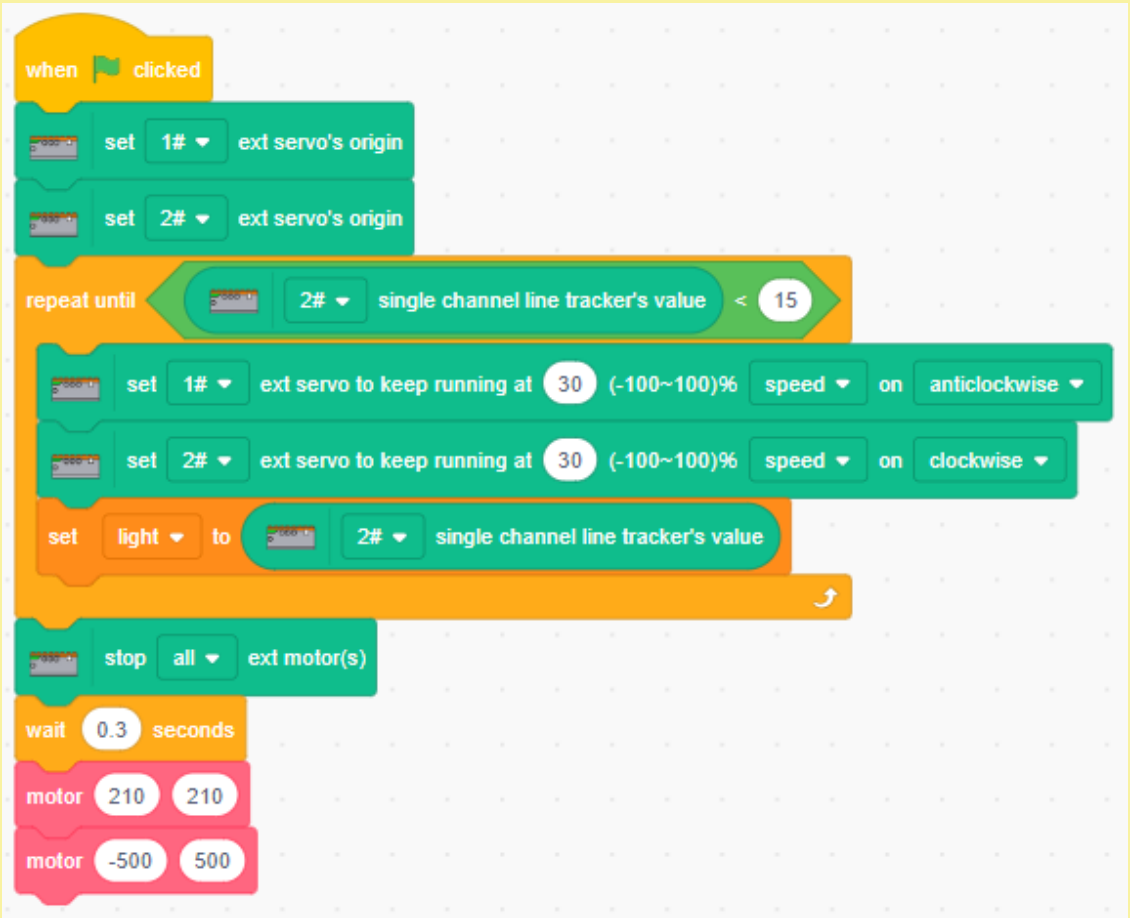


Task

Try to complete the subsequent actions using my module from the Lesson 4.

Referrable Program





Additional Task

Adjust the sensor to face directly forward, detect obstacles, and try to stop or maneuver around them.