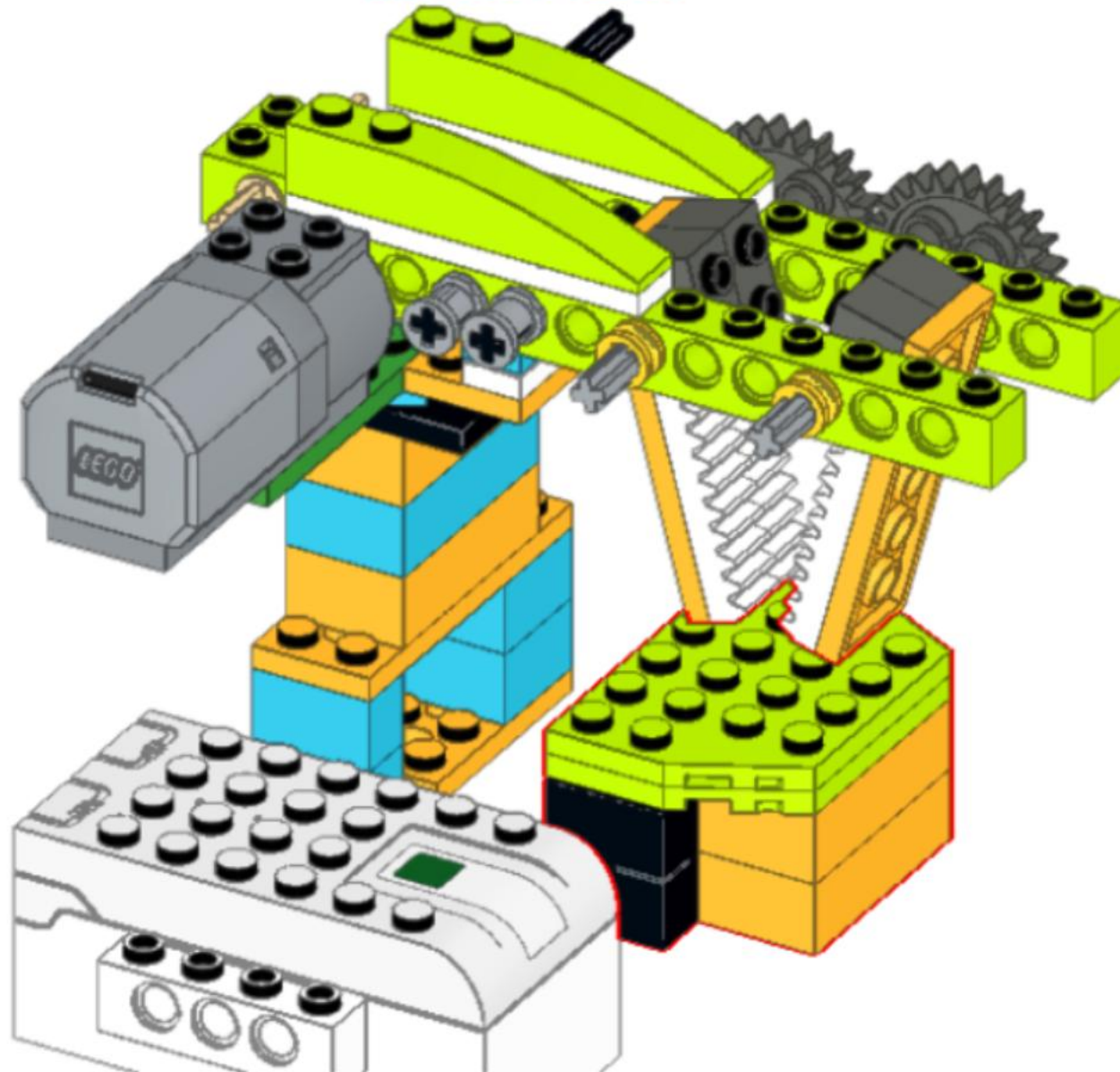


INSTRUCTIONS

ROBOTIC ARM WITH LEGO WEDO 2.0 + MICRO:BIT

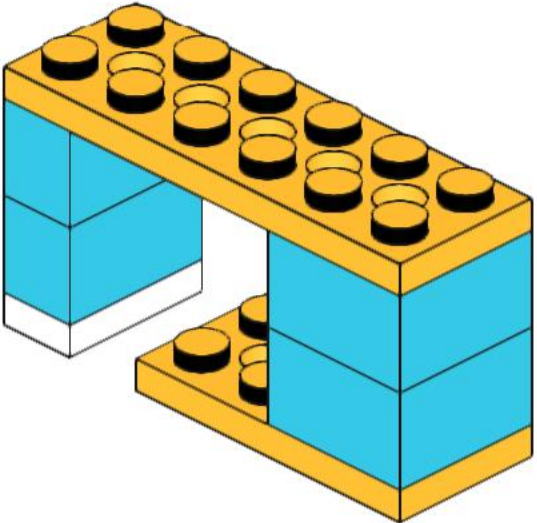
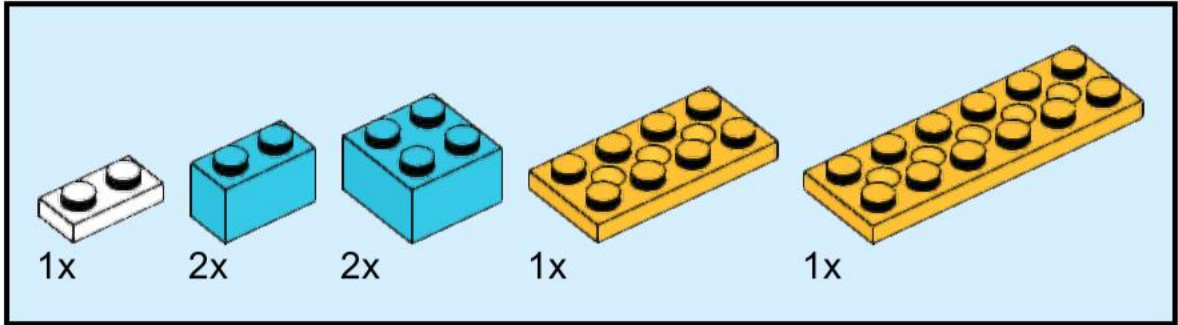


V 1.0

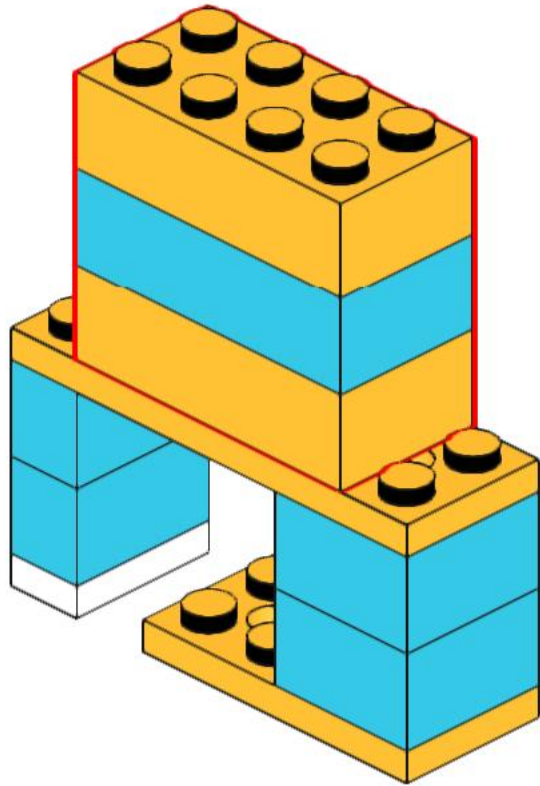
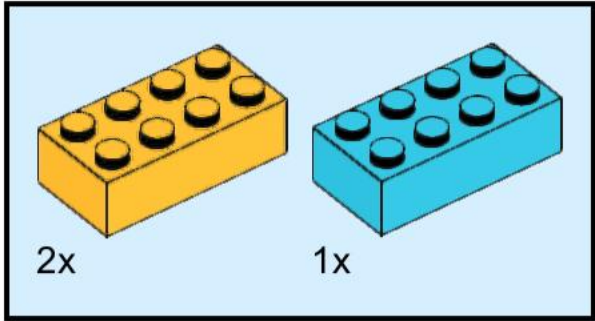
For any question contact us:

giancarlo.tech@gmail.com
<https://www.facebook.com/codingasprincess>

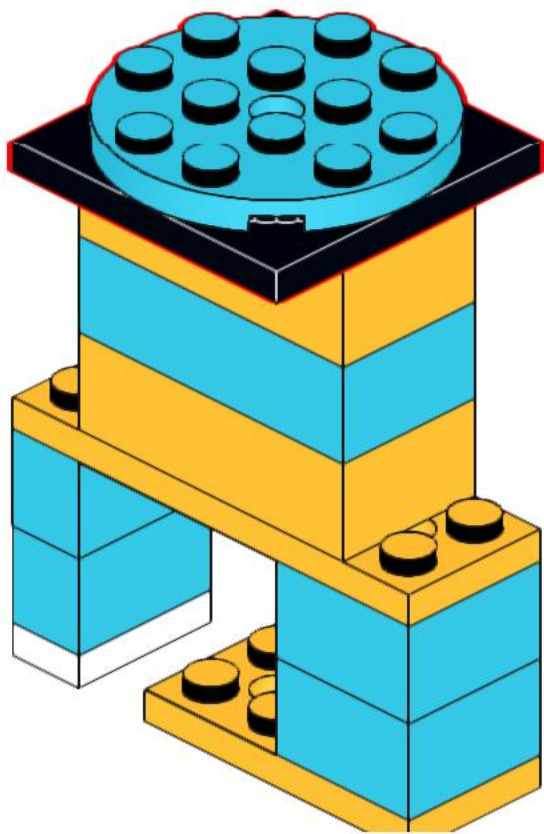
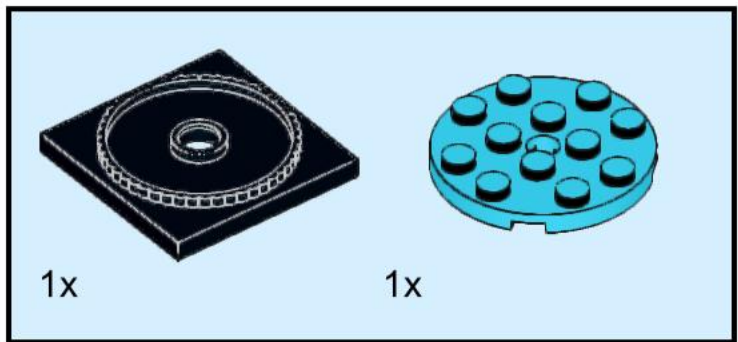
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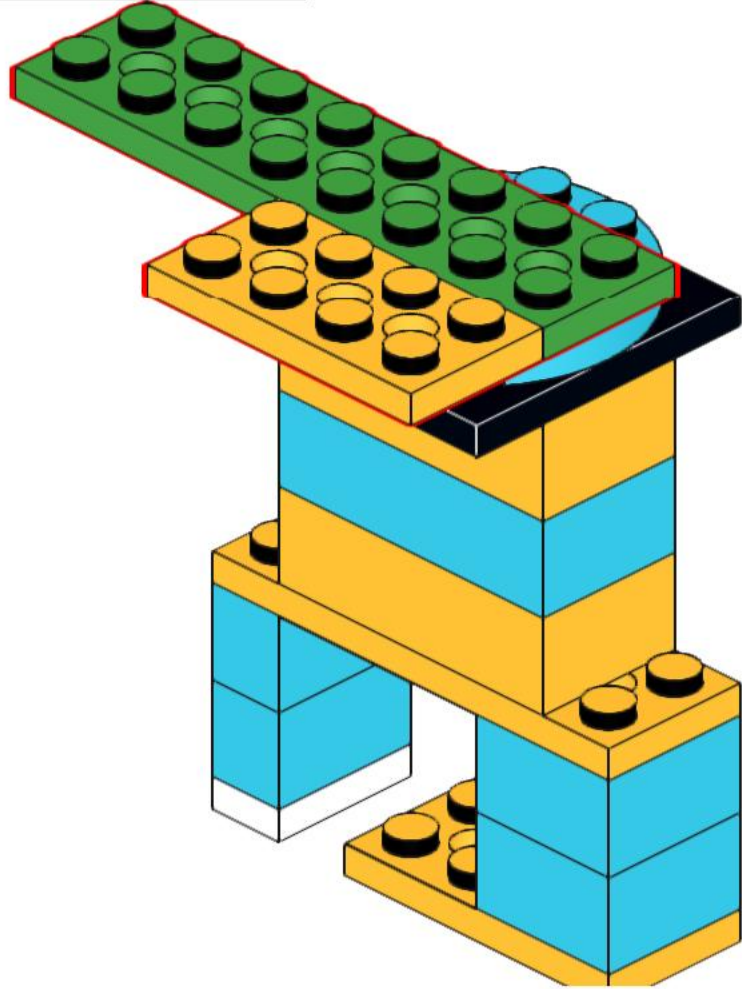
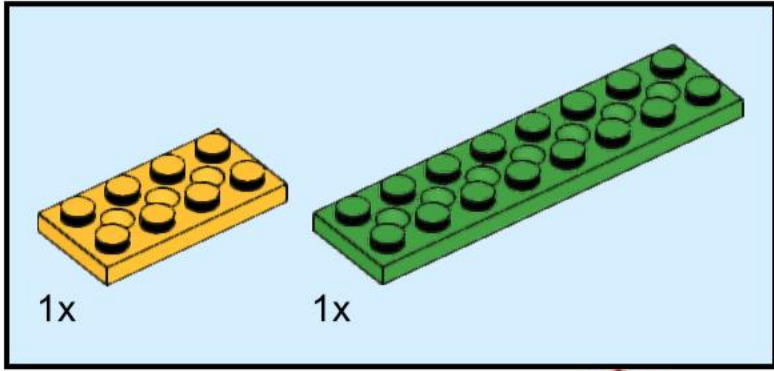
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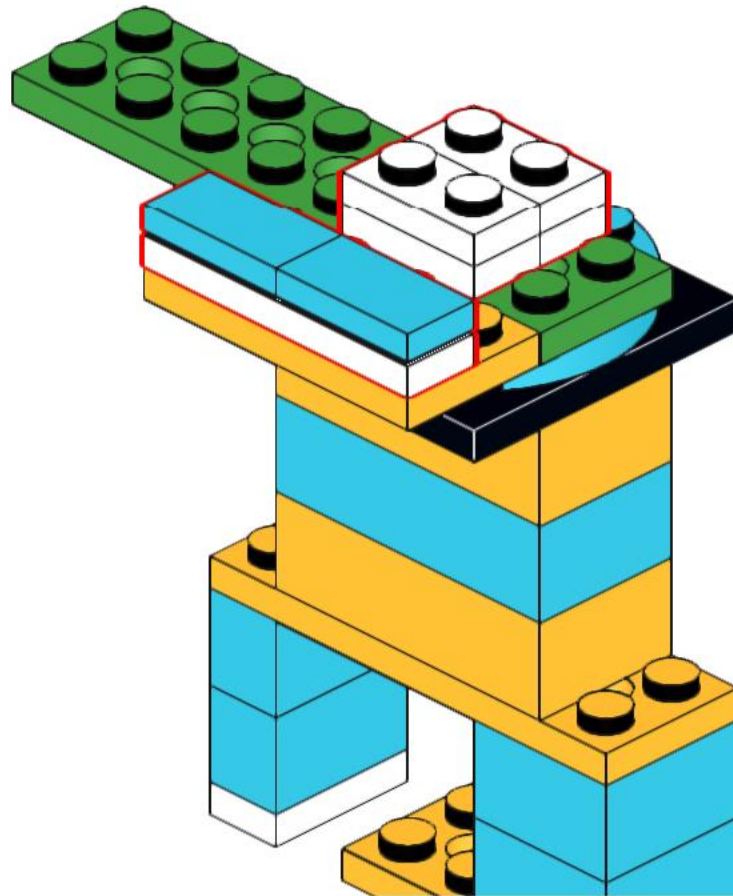
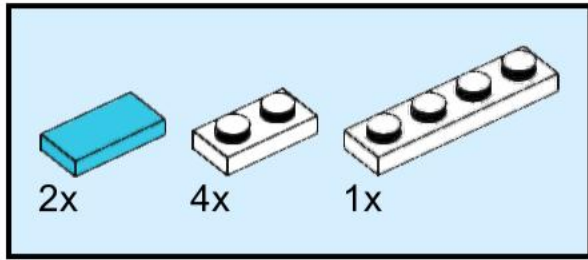
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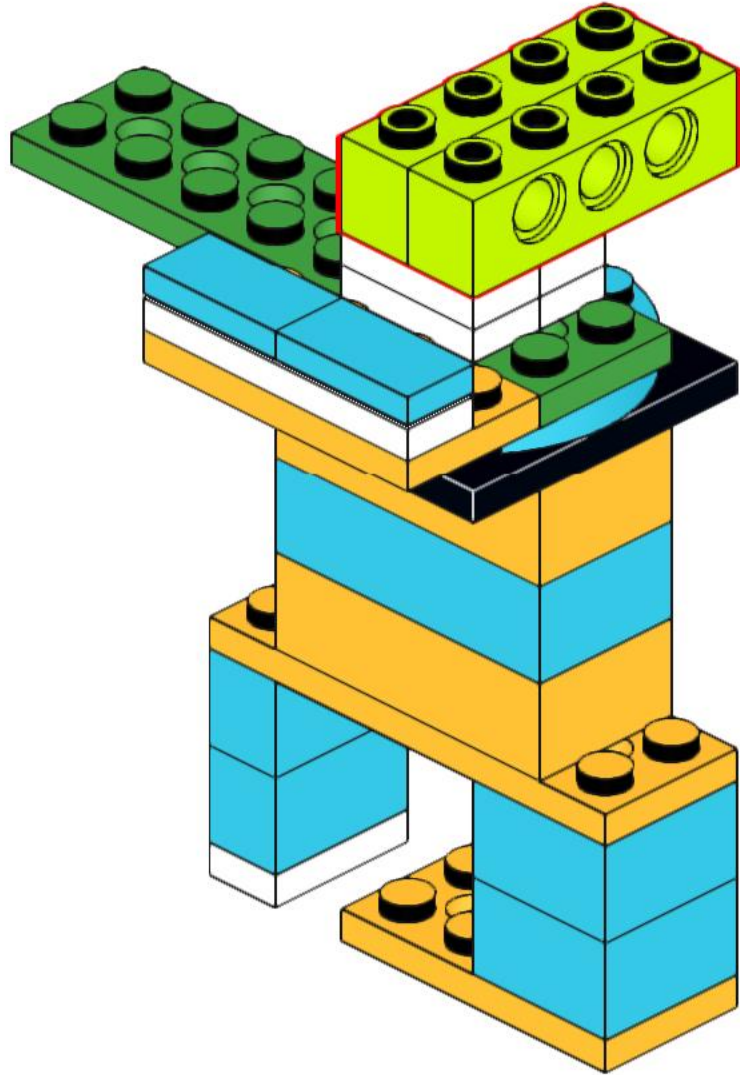
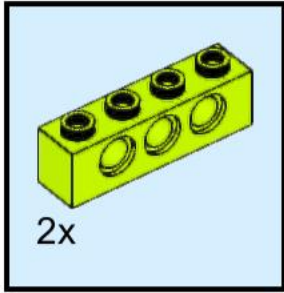
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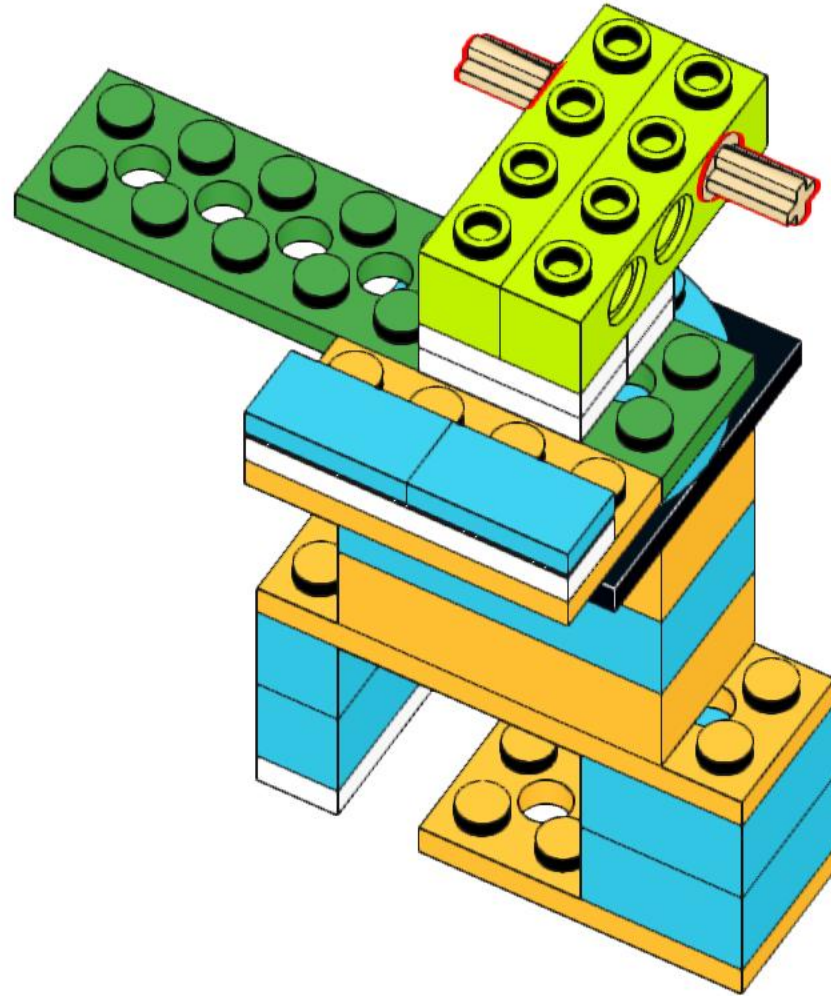
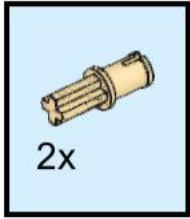
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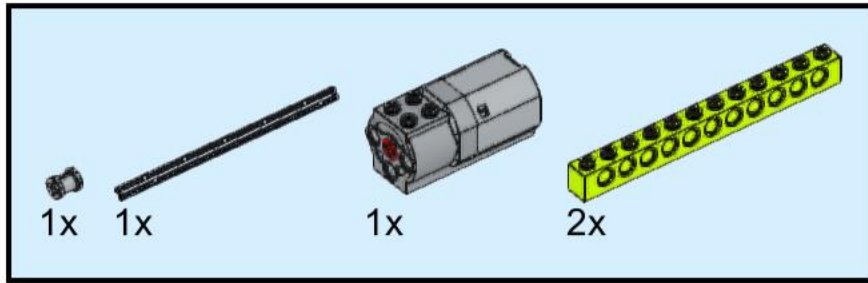
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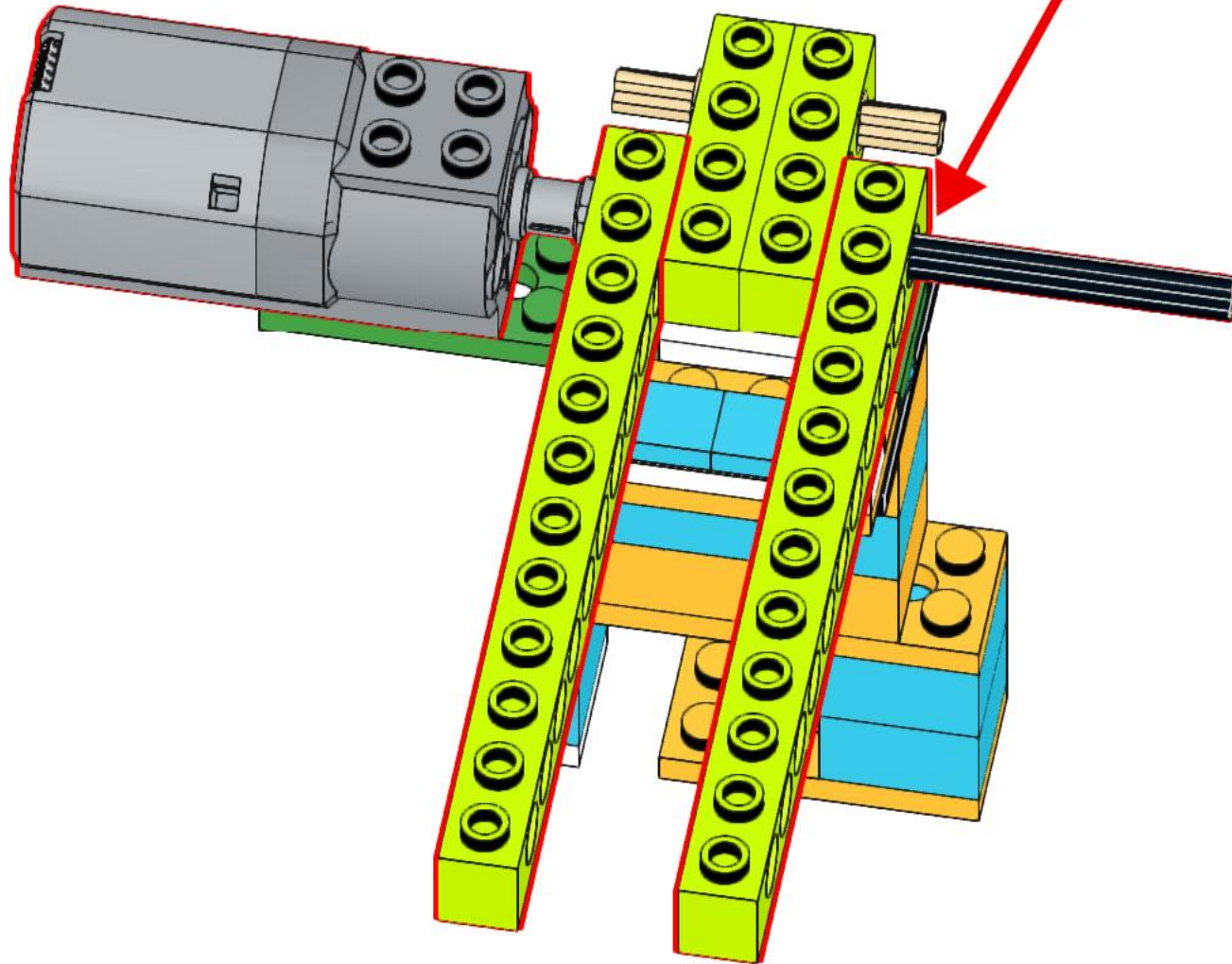
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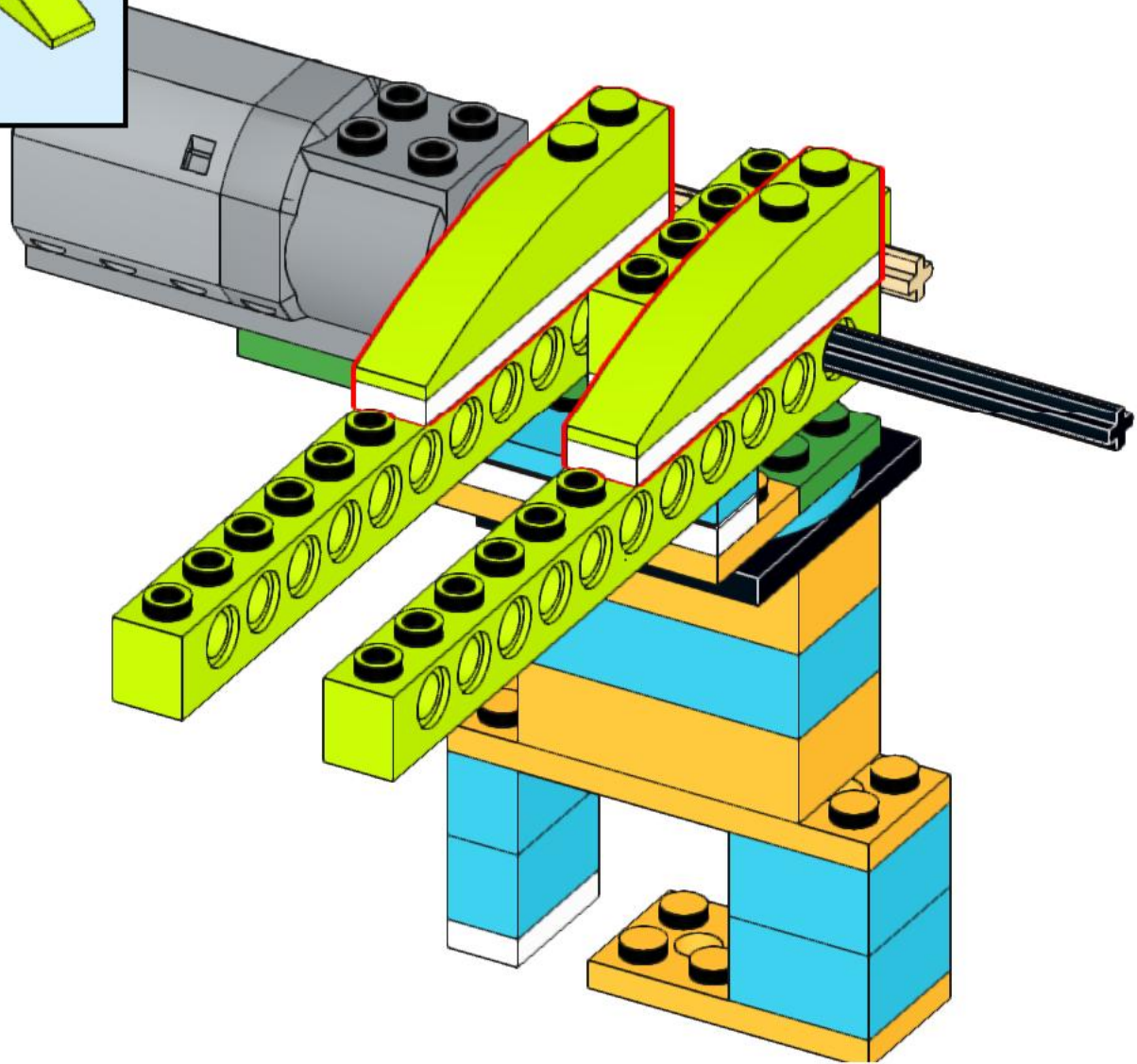
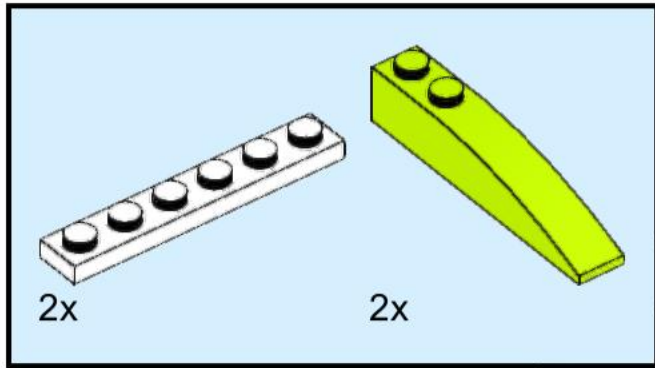
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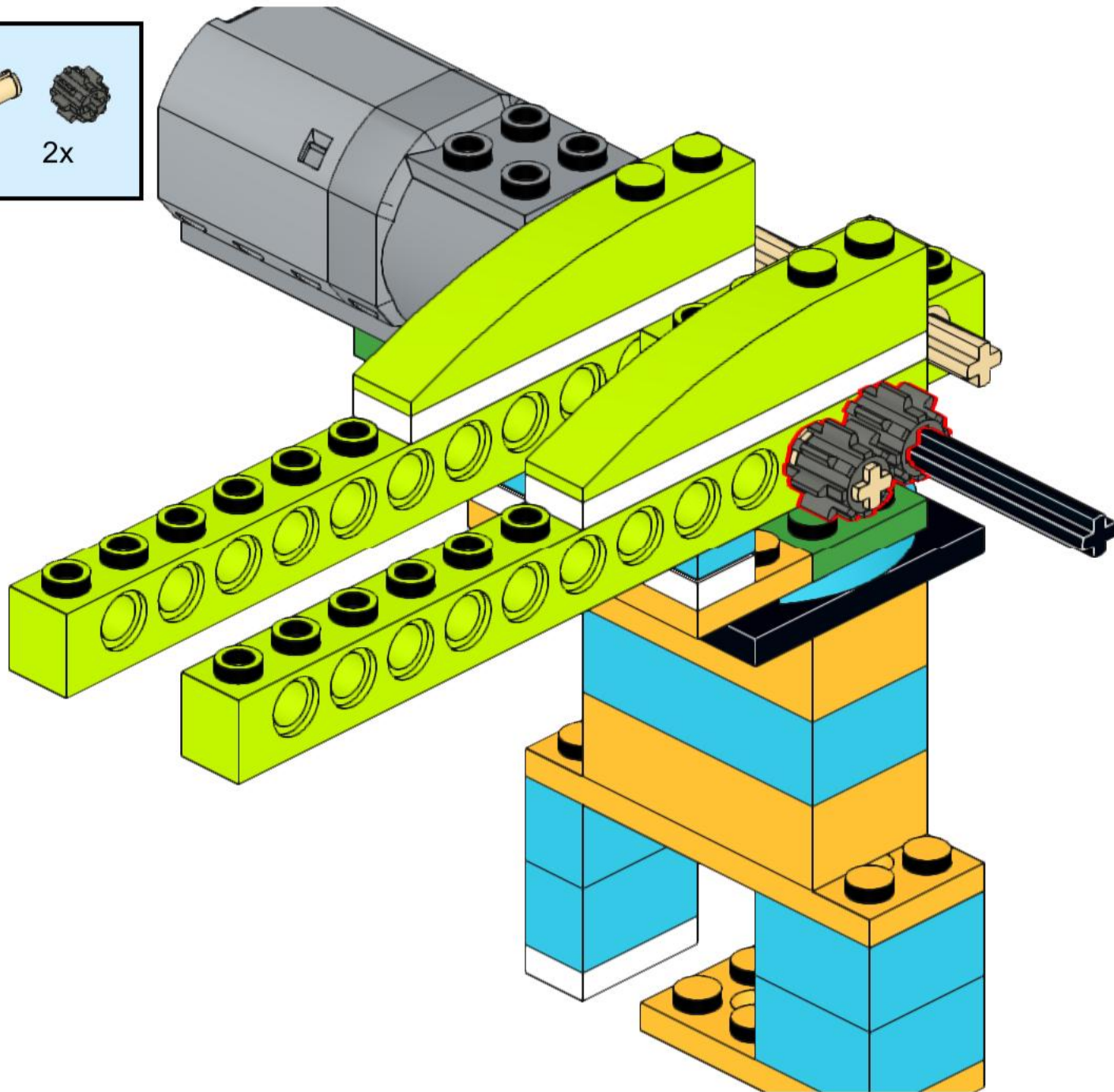
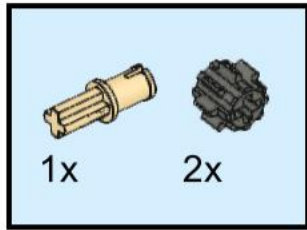
Insert the axle in the first pivot.



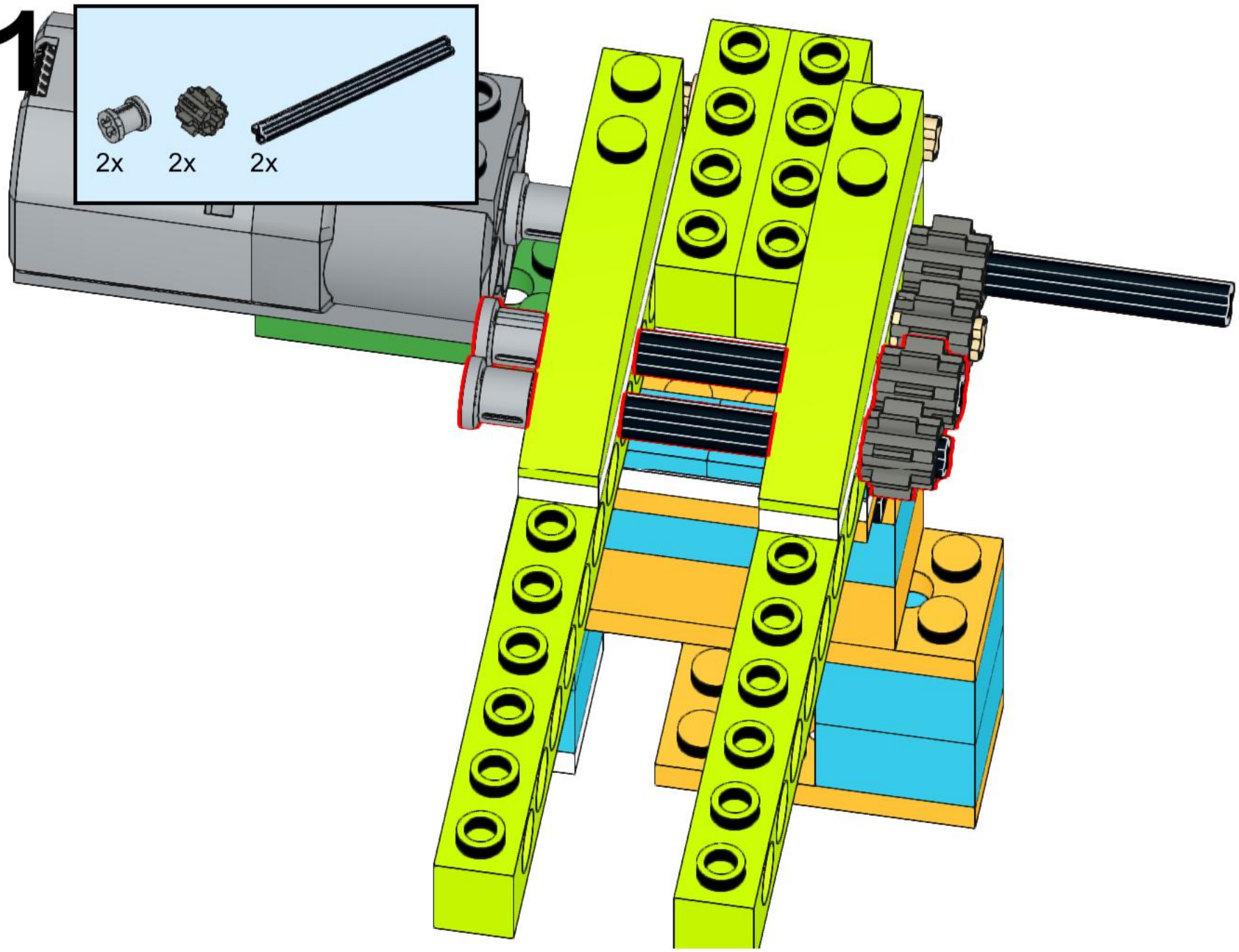
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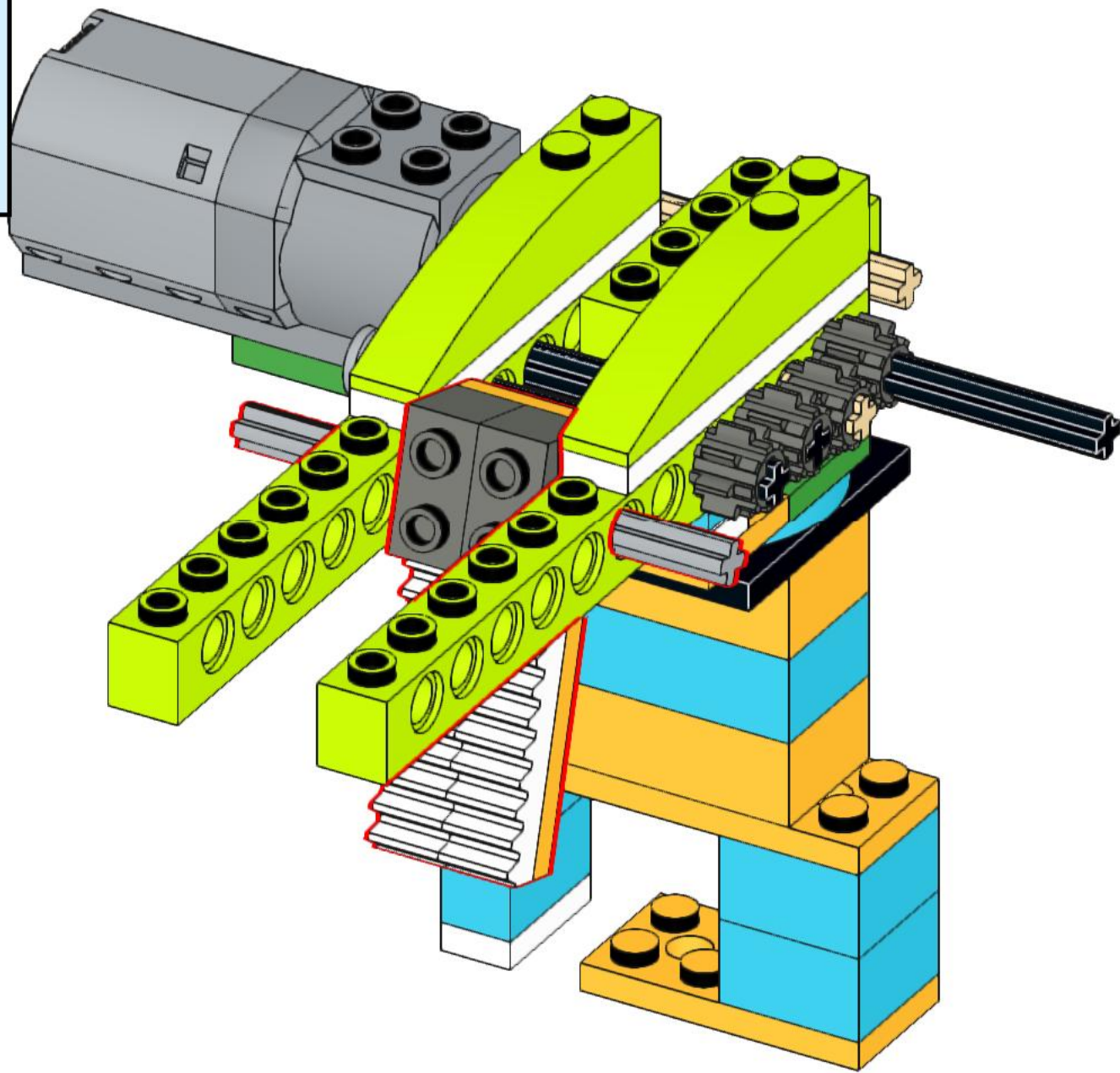
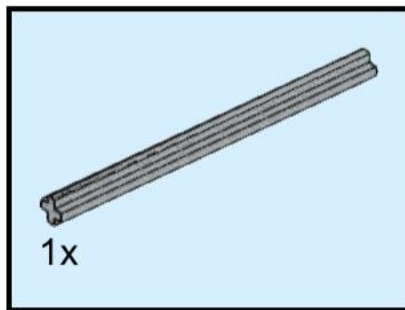
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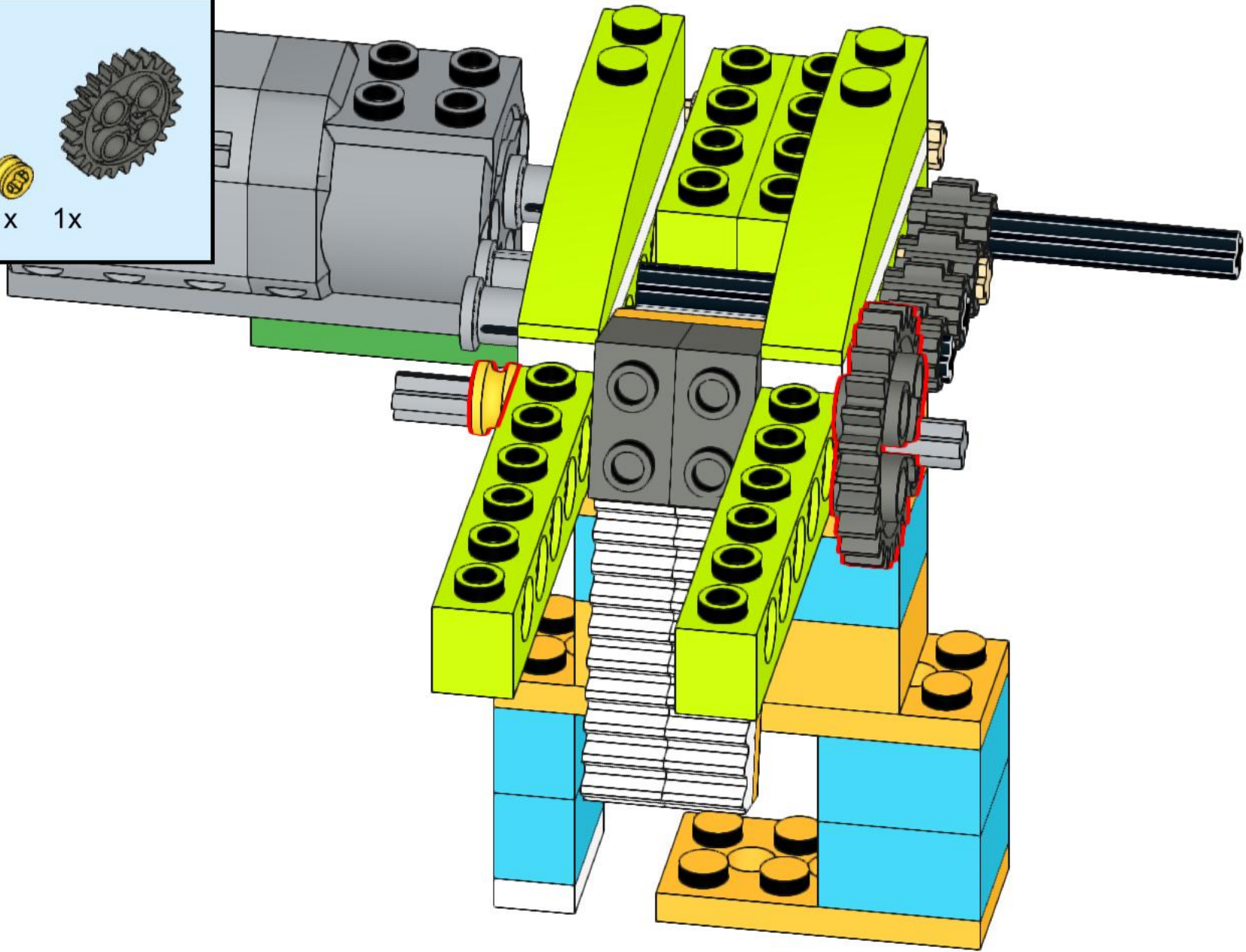
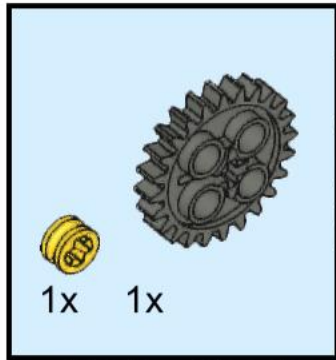
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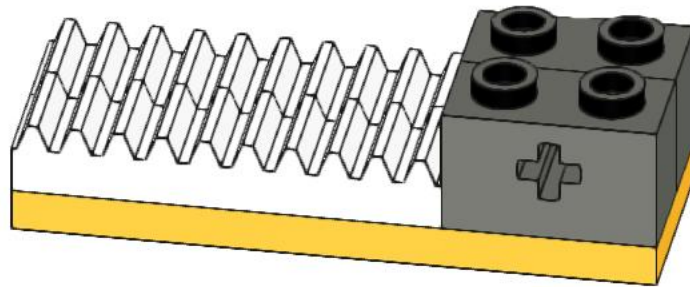
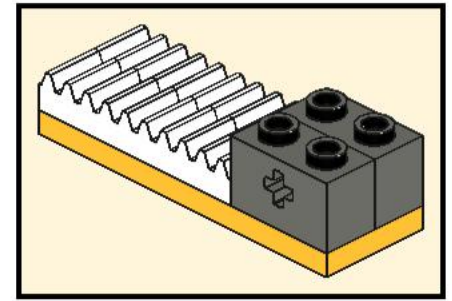
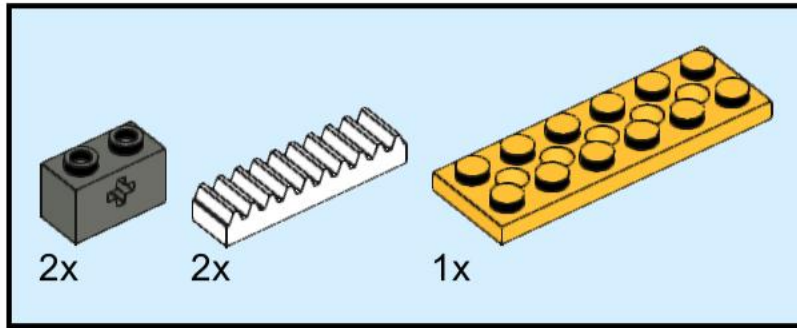
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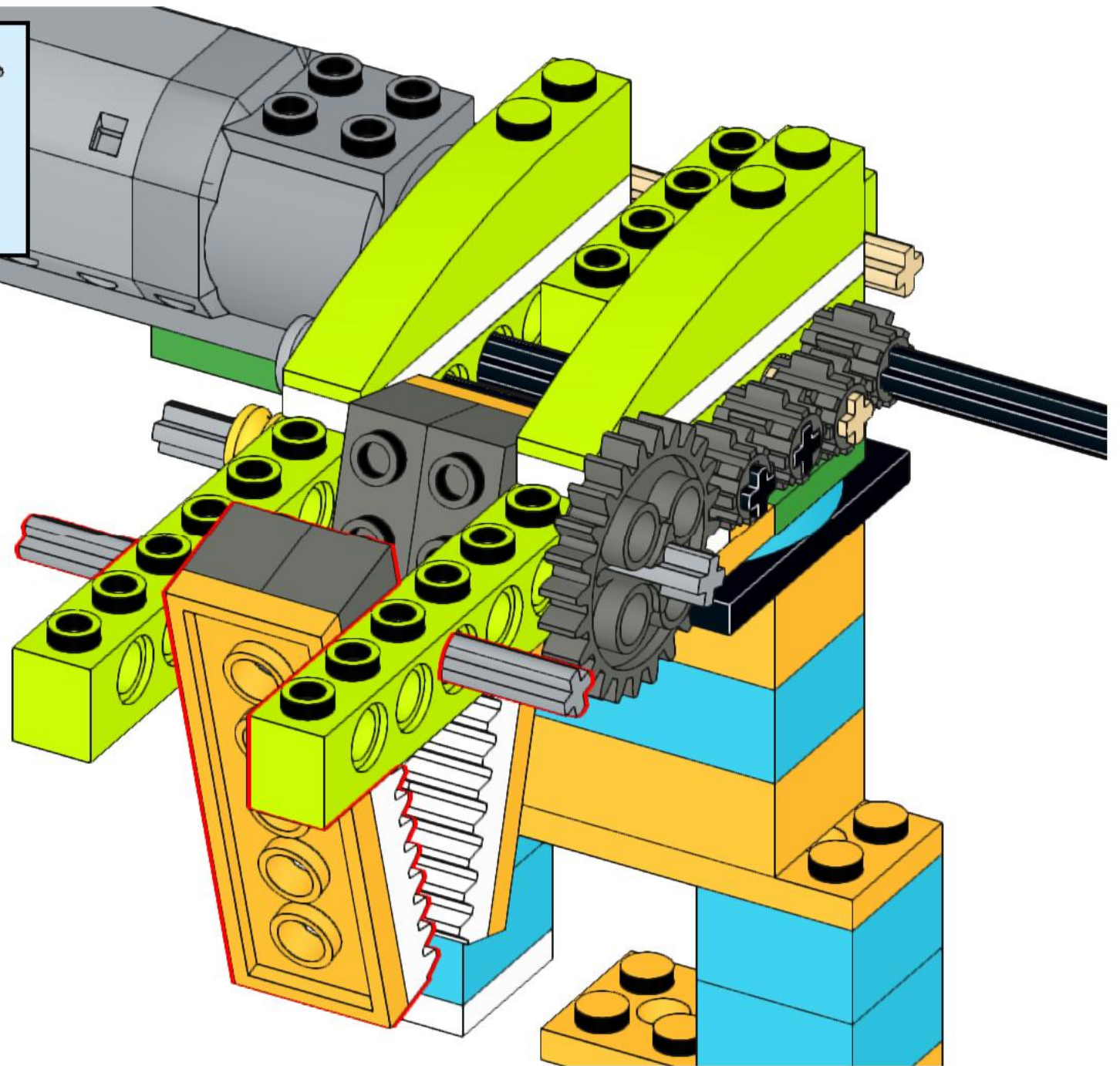
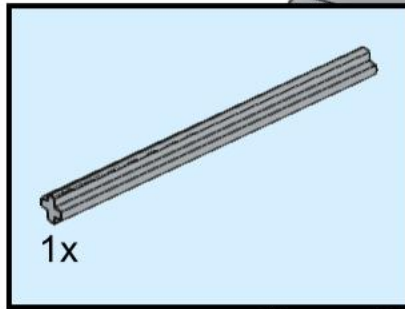
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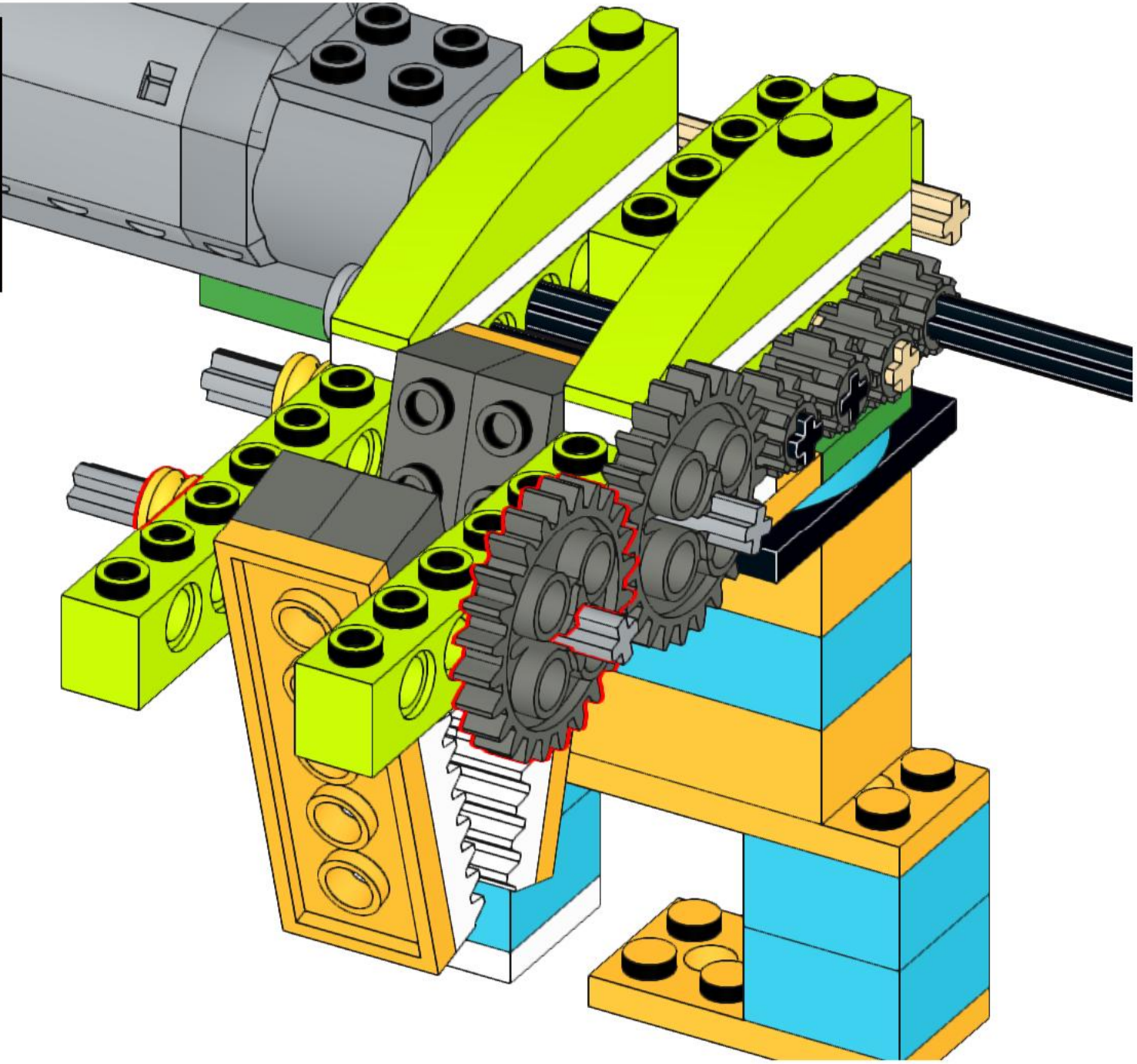
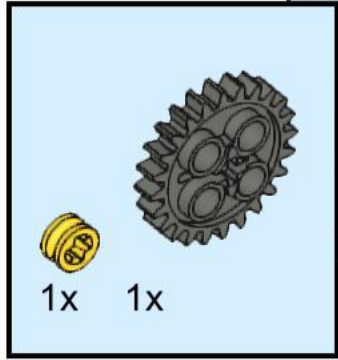
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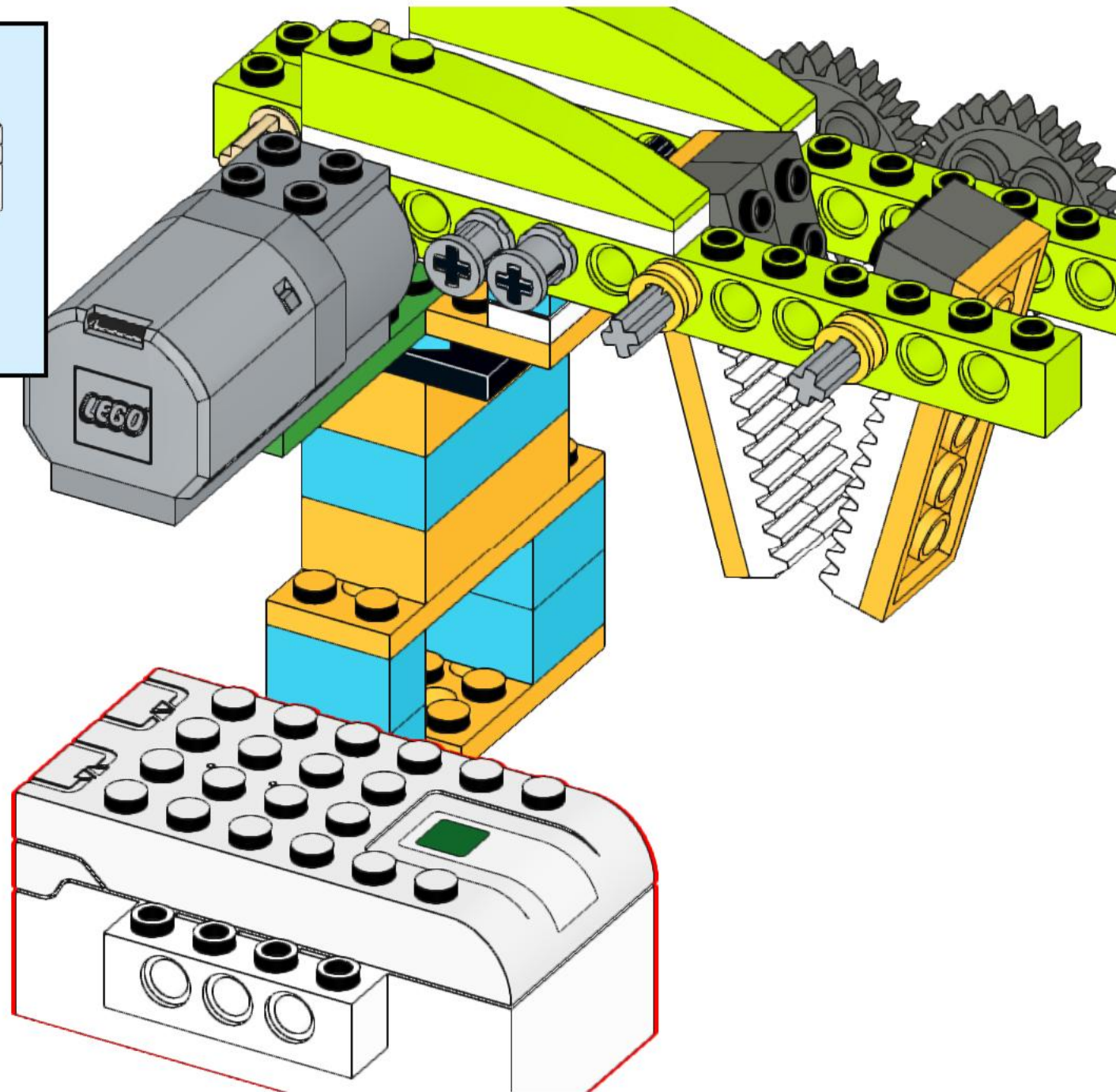
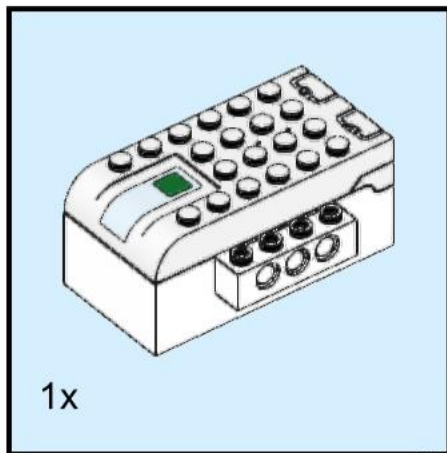
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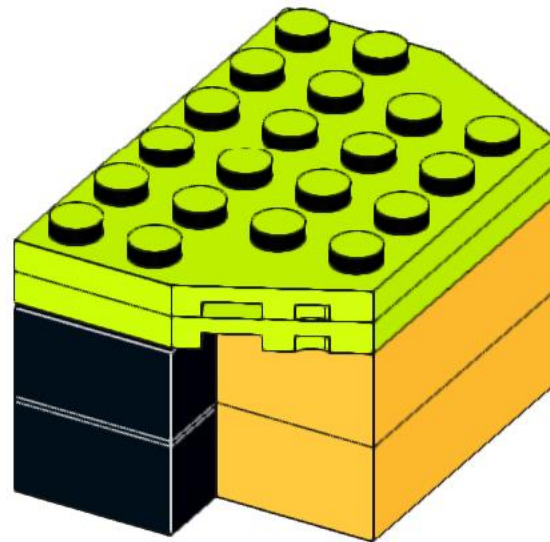
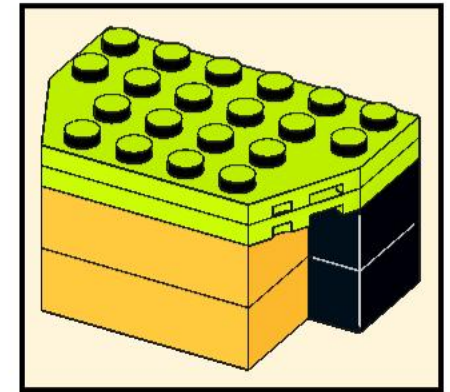
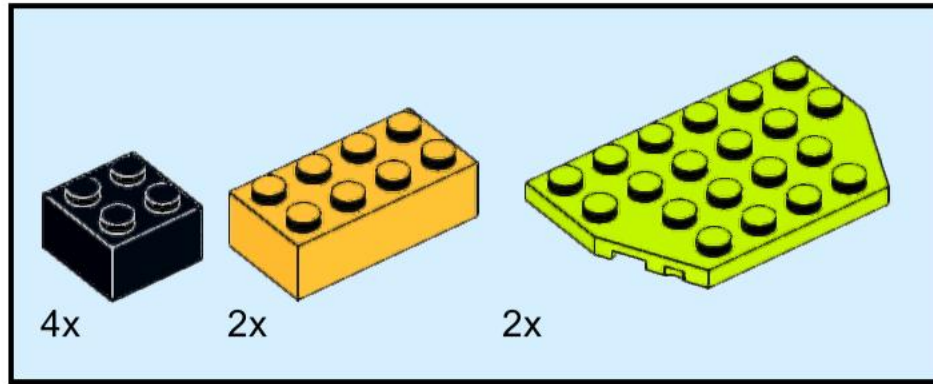
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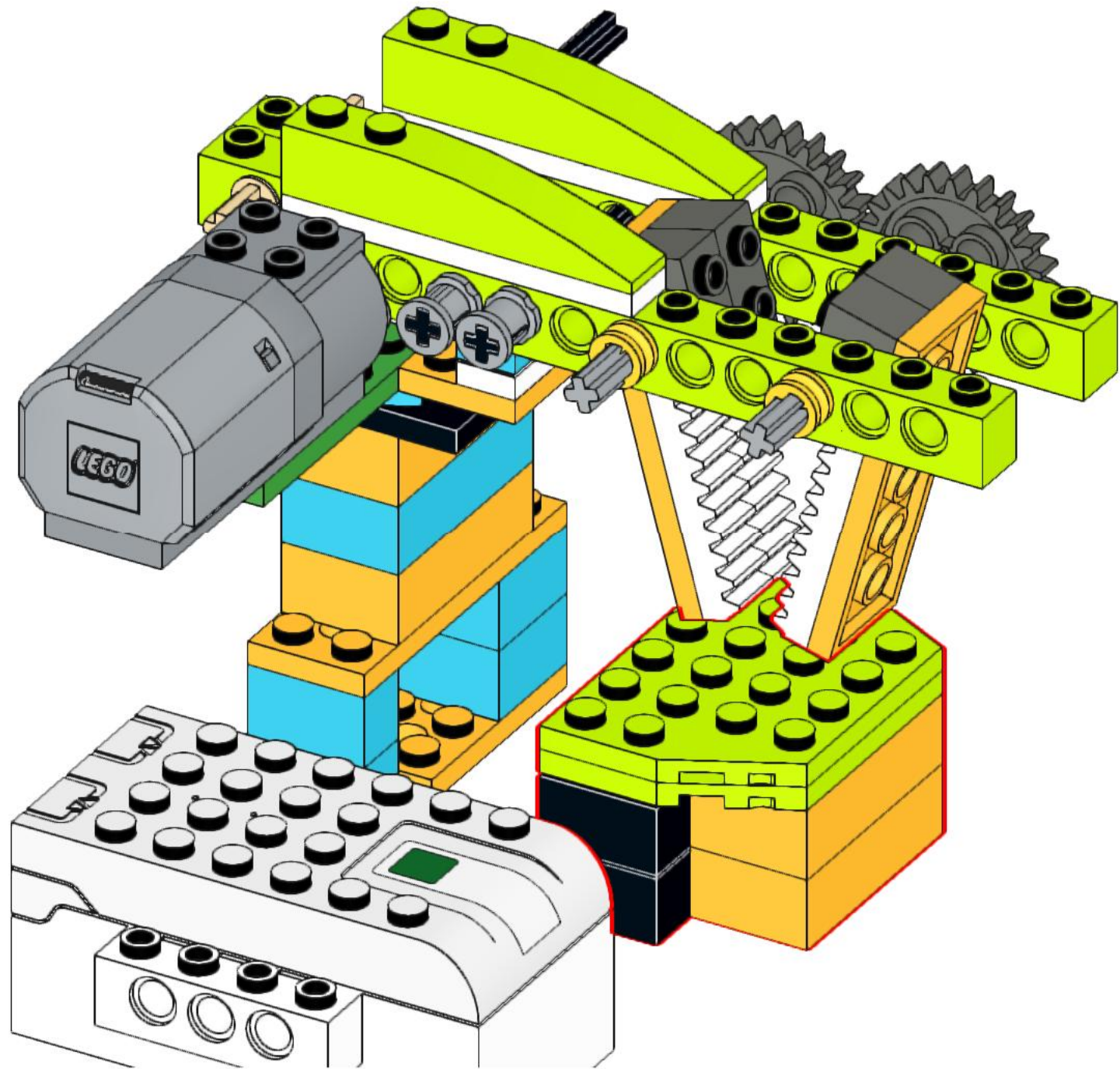
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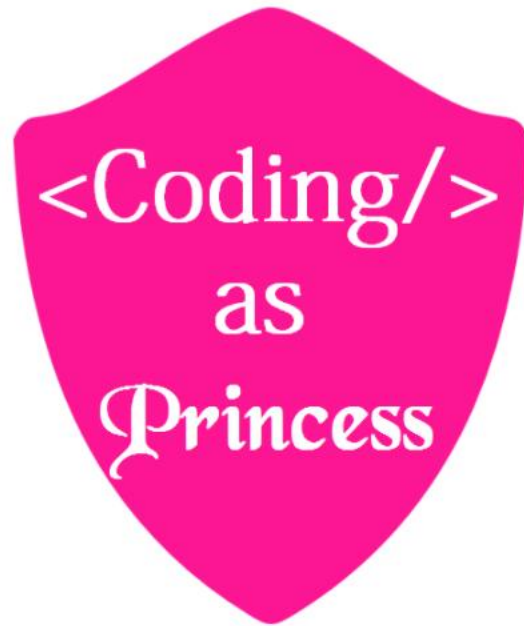


19



20





LETS CODE USING LEGO WEDO 2.0 APP



This should raise the arm.



This should lower the arm.





**LETS CODE USING MICROBIT AND
SCRATCH**

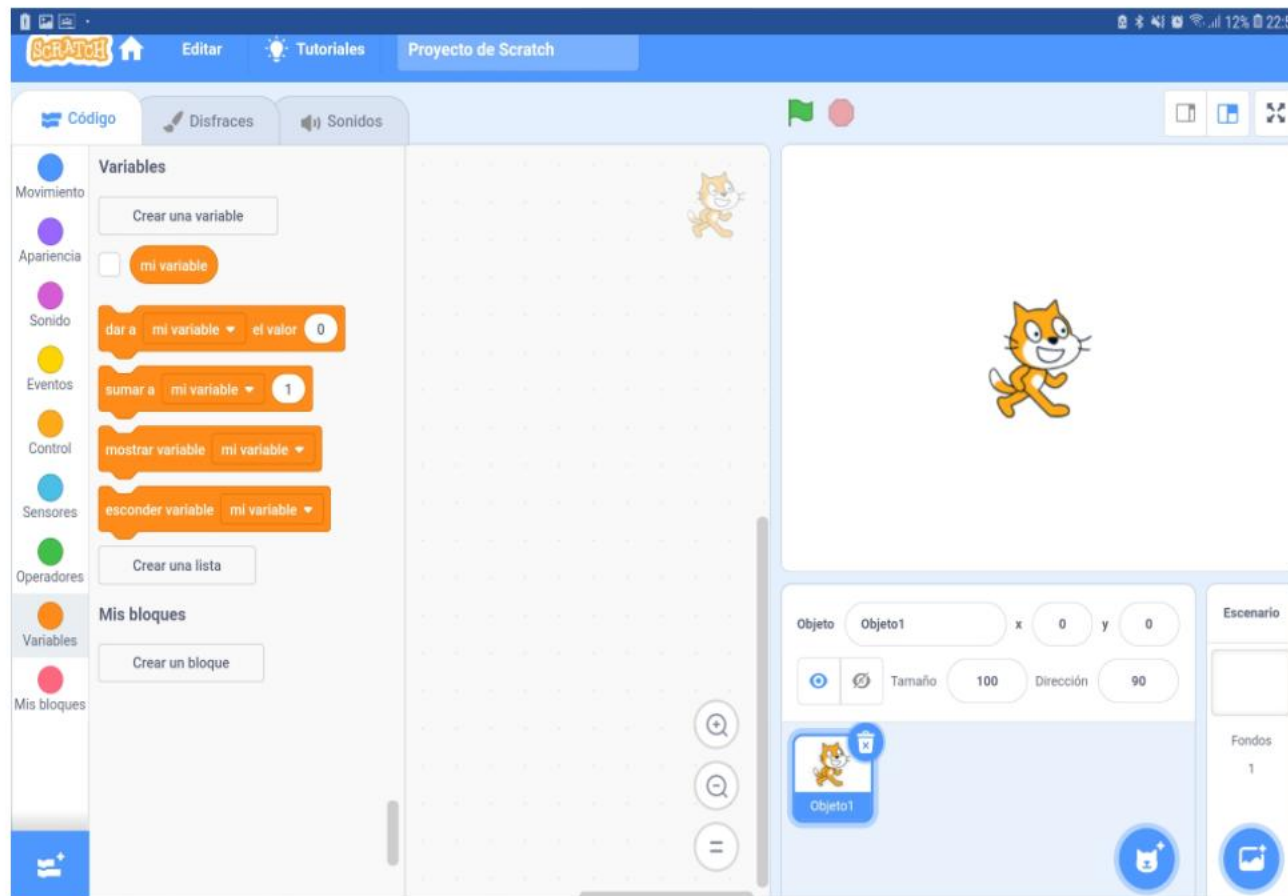
STEPS

1.- Install Scratch from this link:

<https://play.google.com/store/apps/details?id=org.scratch&hl=es>

2.- Create a new Scratch Project

After you create a Scratch project



STEPS

3.- Add micro:bit extension

The image shows the Scratch editor interface. On the left, the 'Variables' block is visible. In the center, the Scratch cat character is on the stage. On the right, the 'Elige una extensión' (Choose an extension) dialog box is open, displaying a grid of extension options. The 'micro:bit' extension is highlighted with a black arrow. Below the dialog box, the text 'Add new extension' is written with an arrow pointing to the '+' icon in the bottom-left corner of the Scratch editor. Below that, the text 'Select micro:bit extension' is written with an arrow pointing to the 'micro:bit' extension card in the dialog box.

Add new extension

Select micro:bit extension

Elige una extensión

Extension Name	Requires	Collaboration
Haz que tus proyectos hablen.	Requiere Wi-Fi	En colaboración con Amazon Web Services
Traduce texto a muchos idiomas.	Requiere Wi-Fi	En colaboración con Google
Convierte cualquier cosa en una tecla.		En colaboración con JoyLabz
micro:bit	Requiere Bluetooth y Wi-Fi	En colaboración con micro:bit
LEGO MINDSTORMS EV3	Requiere Bluetooth y Wi-Fi	En colaboración con LEGO
LEGO BOOST	Requiere Bluetooth y Wi-Fi	En colaboración con LEGO

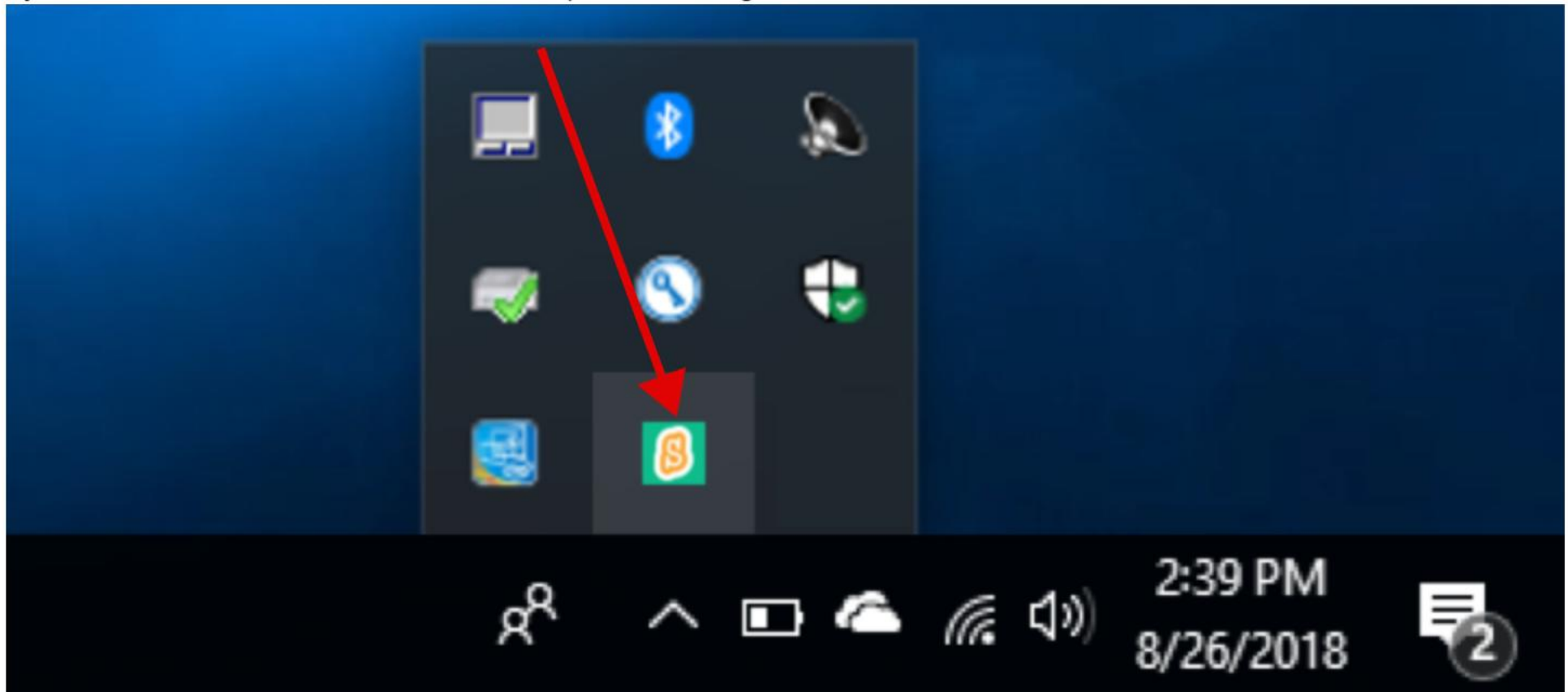
STEPS

4.- Install Scratch Link **ONLY if you will work with Scratch in PC, with devices (Tablets) is not needed, but in this tutorial we are working with a tablet.**

You will need to install Scratch Link from this LINK

<https://downloads.scratch.mit.edu/link/windows.zip>

After you install Scratch link, make sure it is up and running, it should be in the toolbar.



STEPS

4.- Install Sractch micro:bit HEX file in your micro:bit

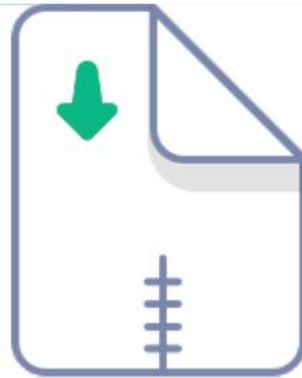
This file needs to be added in microbit by using USB cable.

1



Connect micro:bit to your PC with a USB cable

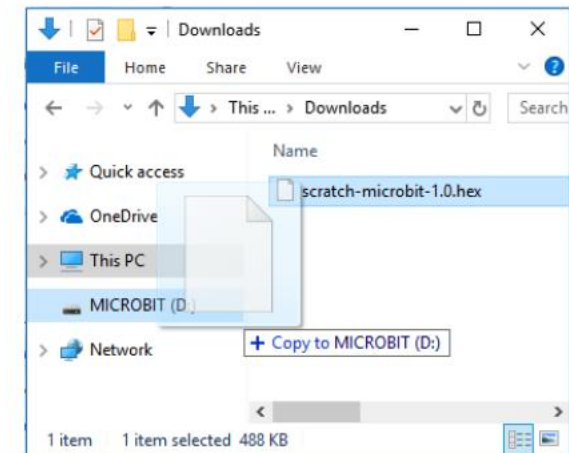
2



Download the file Scratch micro:bit HEX from this link.

<https://downloads.scratch.mit.edu/microbit/sratch-microbit-1.1.0.hex.zip>

3

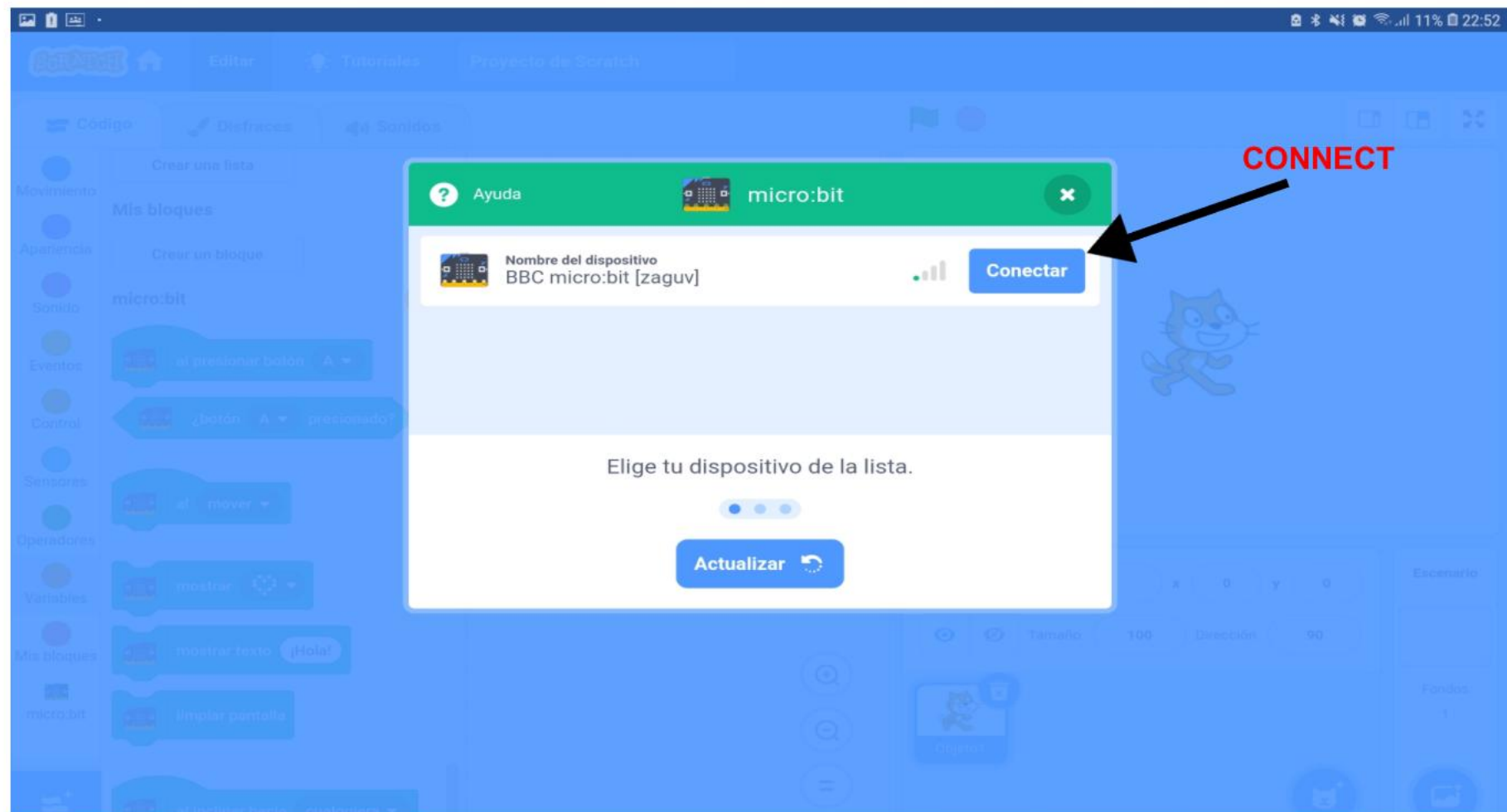


Drag and Drop the HEX file into the micro:bit

STEPS

4.- Bind Scratch with micro:bit

Now in Scratch you should see your micro:bit listed so click in "Connect"



STEPS

4.- Code in Scratch

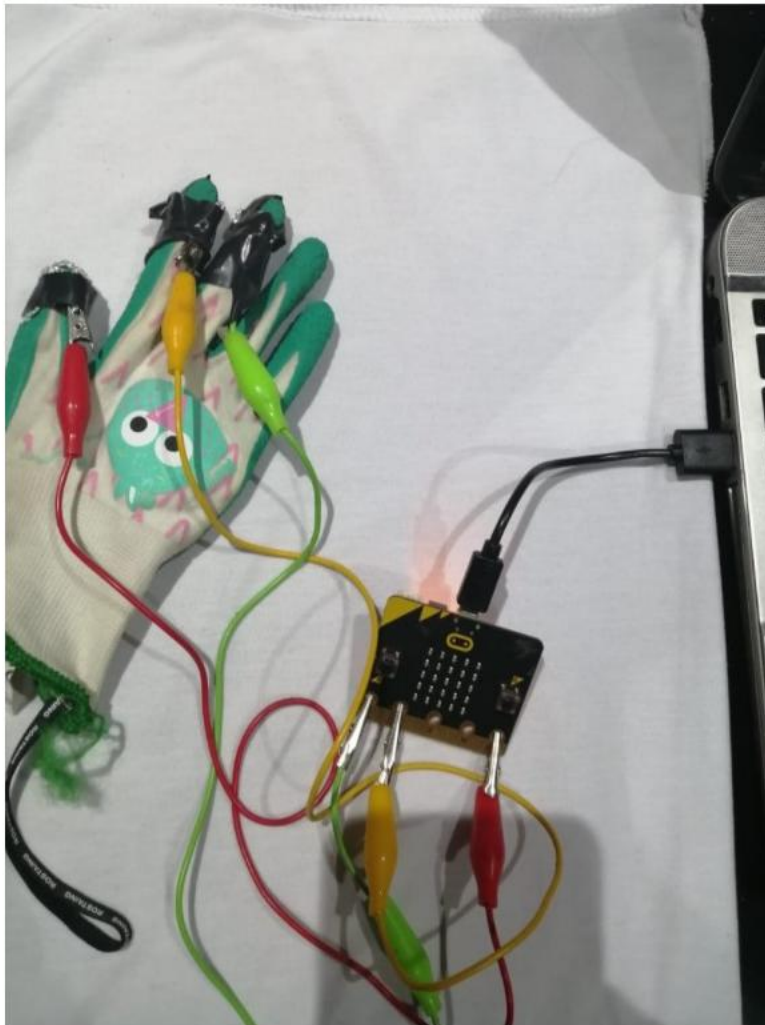
Now lets add some coding blocks to make this work from the scratch side.

The screenshot displays the Scratch IDE interface. The top navigation bar includes the Scratch logo, a home icon, and menu options: 'Editar', 'Tutoriales', 'Mano robotica', and 'Guardar ahora'. The left sidebar shows category tabs: 'Código', 'Disfraces', and 'Sonidos'. Below these are category icons for 'Movimiento', 'Apariencia', 'Sonido', 'Eventos', 'Control', 'Sensores', 'Operadores', 'Variables', 'Mis bloques', 'micro.bit', and 'WeDo 2.0'. The main workspace contains two identical code scripts. The first script, under the 'WeDo 2.0' category, consists of the following blocks: 'al conectar pin 1', 'fijar potencia de motor a 50', 'fijar dirección de motor a inversa', 'encender motor durante 1 segundos', and 'apagar motor'. The second script, also under 'WeDo 2.0', consists of: 'al conectar pin 0', 'fijar potencia de motor a 50', 'fijar dirección de motor a un lado', 'encender motor durante 1 segundos', and 'apagar motor'. The right sidebar features a stage with a Scratch cat sprite and a 'Fondos' panel with 'Objeto1' and 'Escenario' settings.

STEPS

5.- glove to manipulate the robotic arm

You can use platinum paper, and scotch paper



THANK YOU

