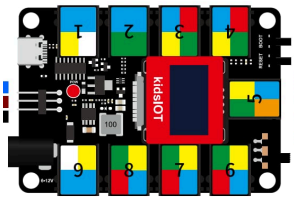
Proyectos

-. Proyecto 03: Molino de viento

1. Descripción general

En este proyecto, vamos a hacer un mini molino de viento.

2. Componentes:

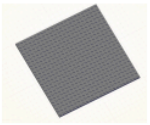
		
Placa Base KidsIOT x1	Potencómetro giratorio x1	Servo 360º x1
		
Cable de conexión x1	Cable USB x1	Serie Lego x1

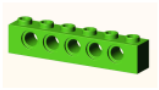
¿Qué es el potenciómetro giratorio?

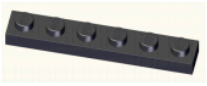
Es un tipo de resistencia que puede cambiar la resistencia de salida o el valor del voltaje girando la perilla del potenciómetro. Tiene dos estados (nivel alto 1 y nivel bajo 0). El valor analógico es diferente y los datos se presentan en un estado lineal como 1-1024. Además, se puede utilizar para ajustar el interruptor de volumen y el interruptor de velocidad del ventilador.

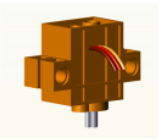
Parámetros:
Voltaje de funcionamiento: 3.3 V ~ 5 V
Corriente de funcionamiento: (máx.) 0,55 mA@5V
Potencia máxima: 2,75 mW
Tipo de señal: señal analógica (0-1023)

3. Instalación


x1


x4 (5 agujeros)

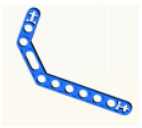

x8


x1 (360º servo)

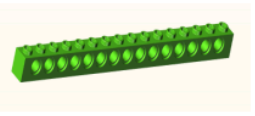

x7

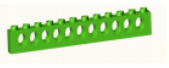

x3

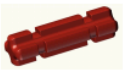

x1

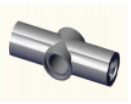

x4

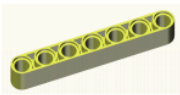

x1

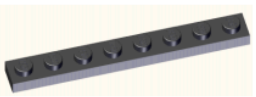

x2 (15 agujeros)

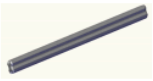

x2 (11 agujeros)


x4


x2


x5 (7 agujeros)

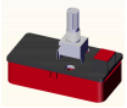

x2


x2 (6,4cm)


x1 (4cm)


x87


x2

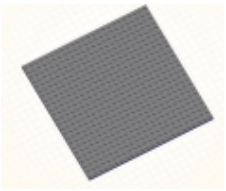

x1


x14


x4

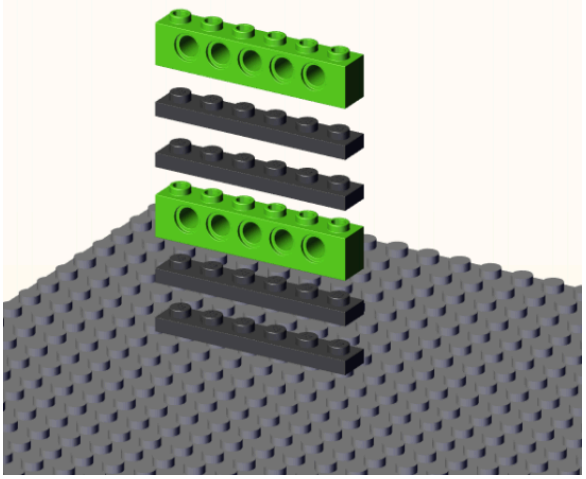

x4

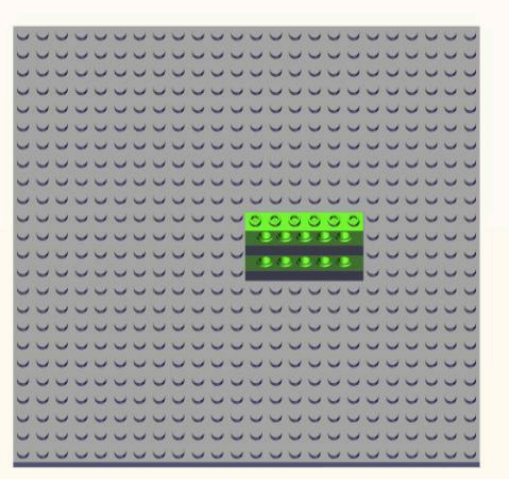
Nota: El color de los bloques de construcción está sujeto al objeto real.


x1

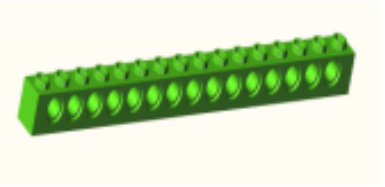

x2 (5 agujeros)

x4

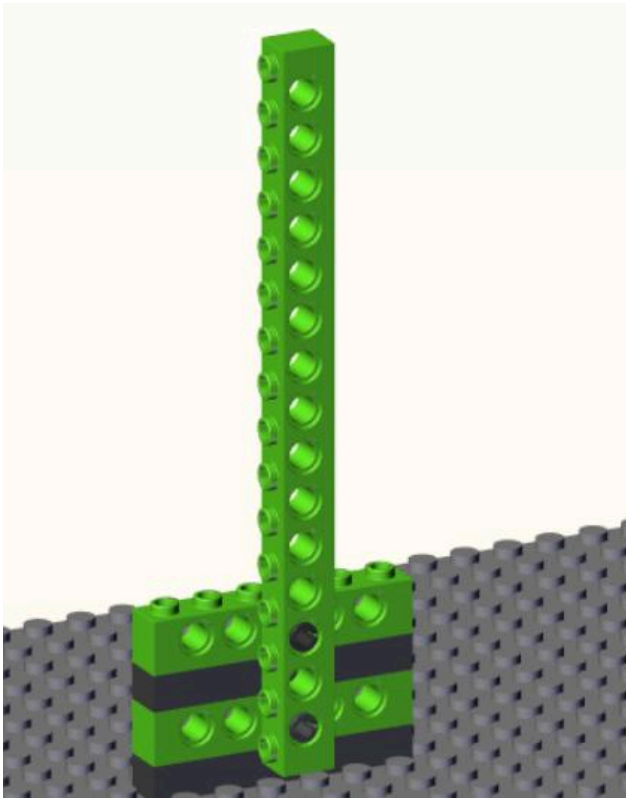


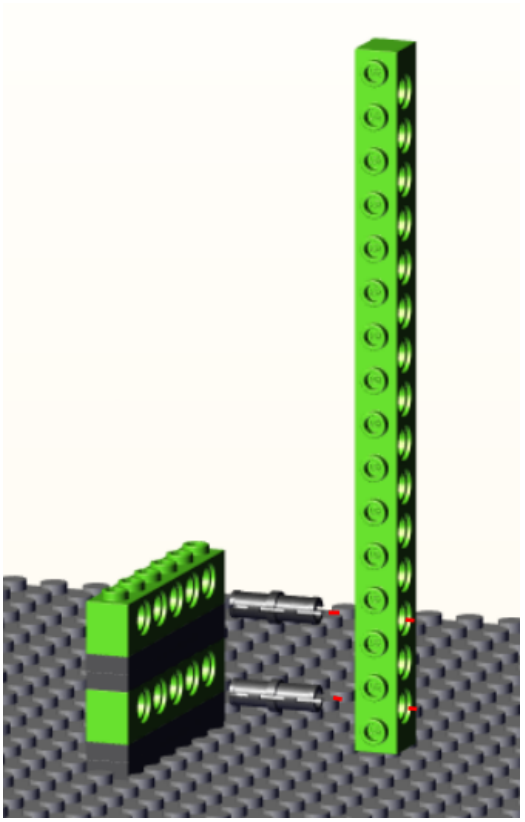


x2



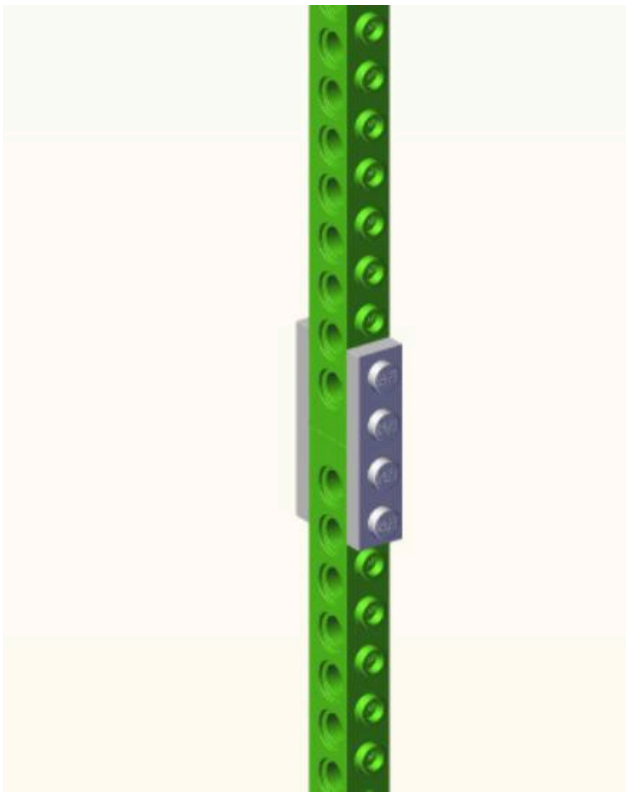
x1 (15 agujeros)

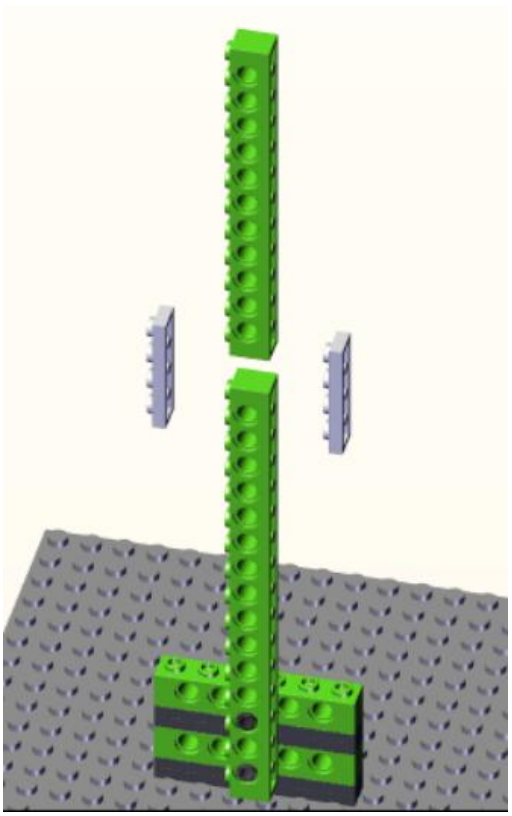




x1 (11 agujeros)

x2

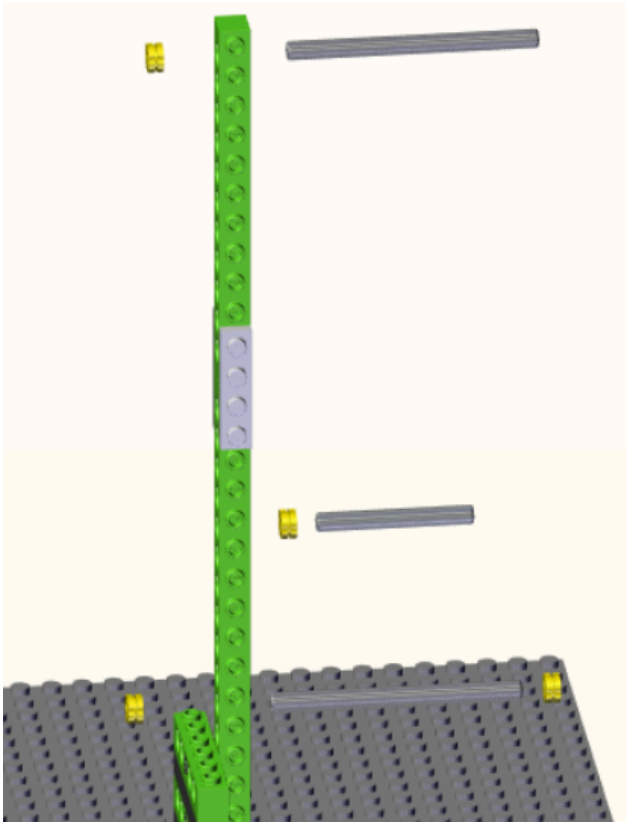


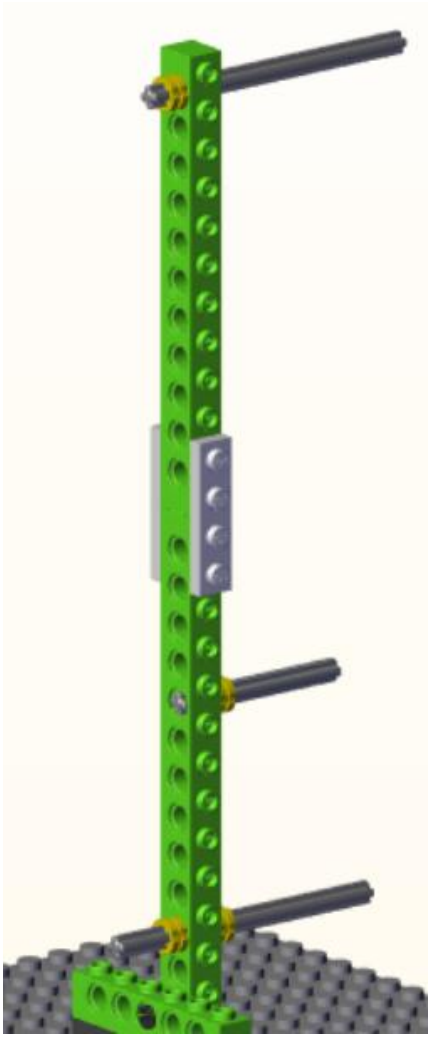


x4

x2 (6,4 cm)

x1 (4 cm)

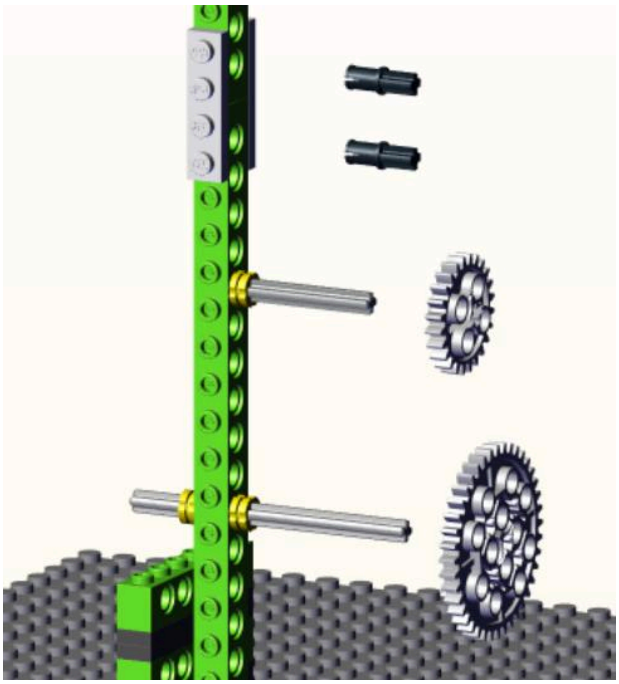


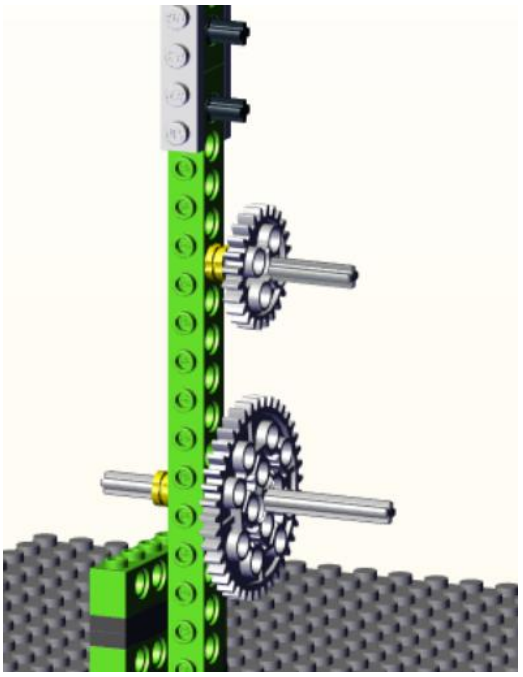


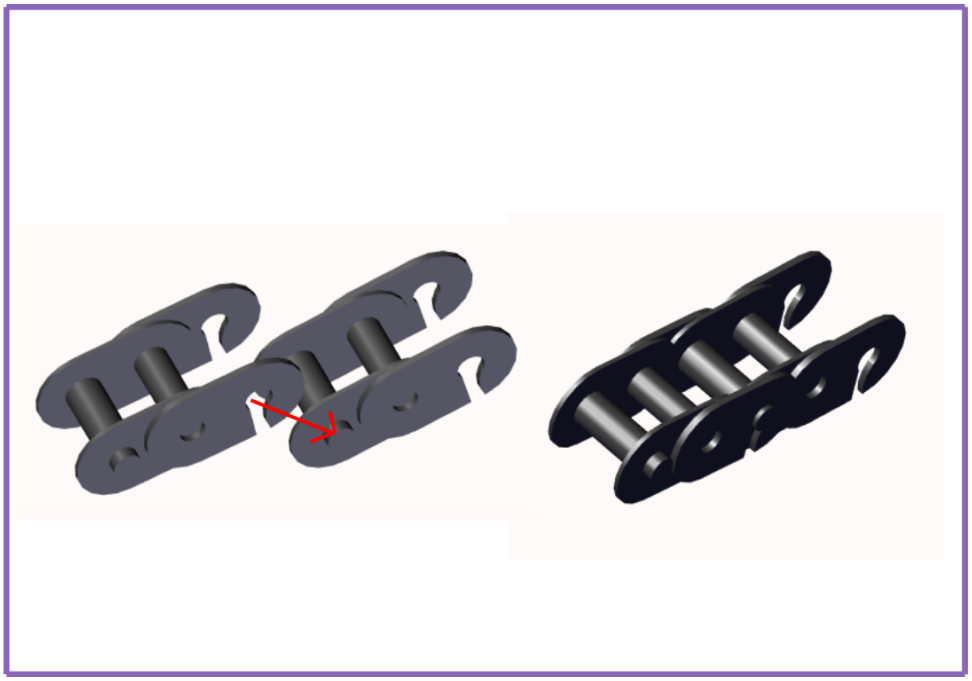

x1


x2

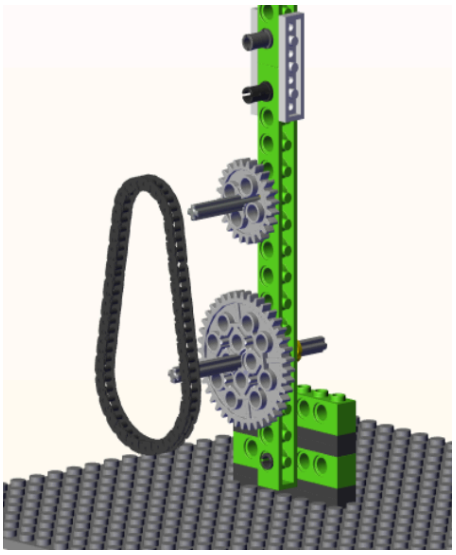

x1

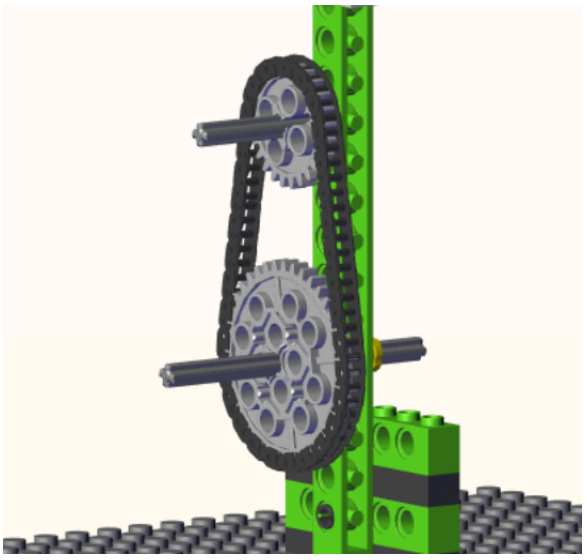






x31



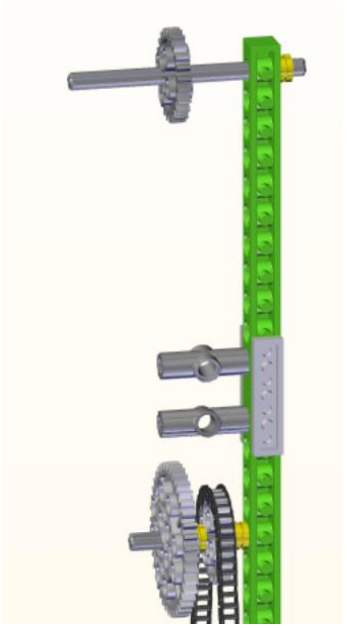


x2

x1

x1

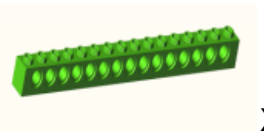
x1



x56

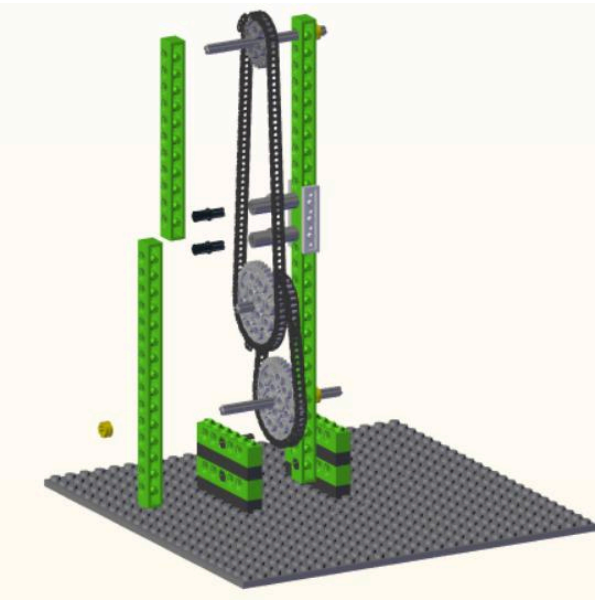
x1

x2

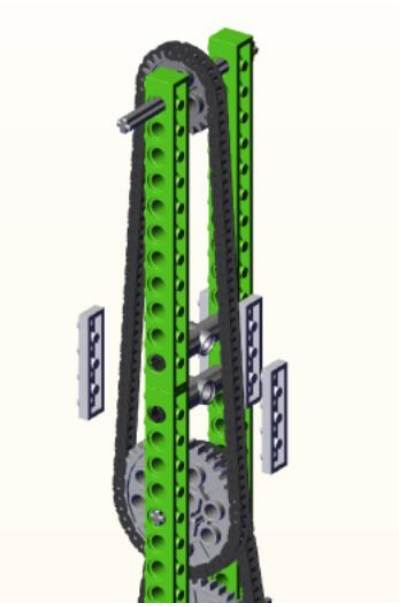


x1 (15 agujeros)

x1 (11 agujeros)

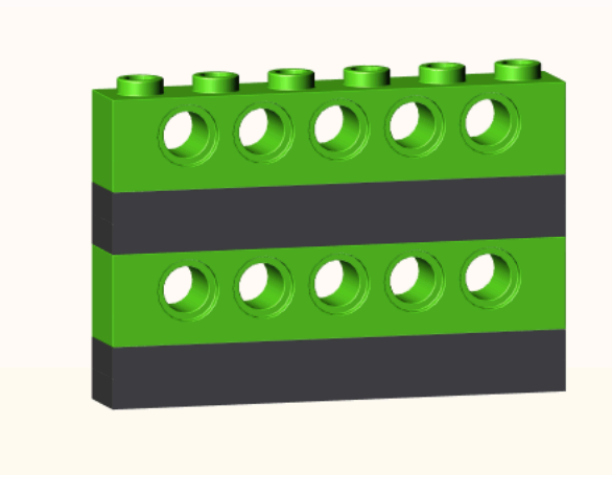


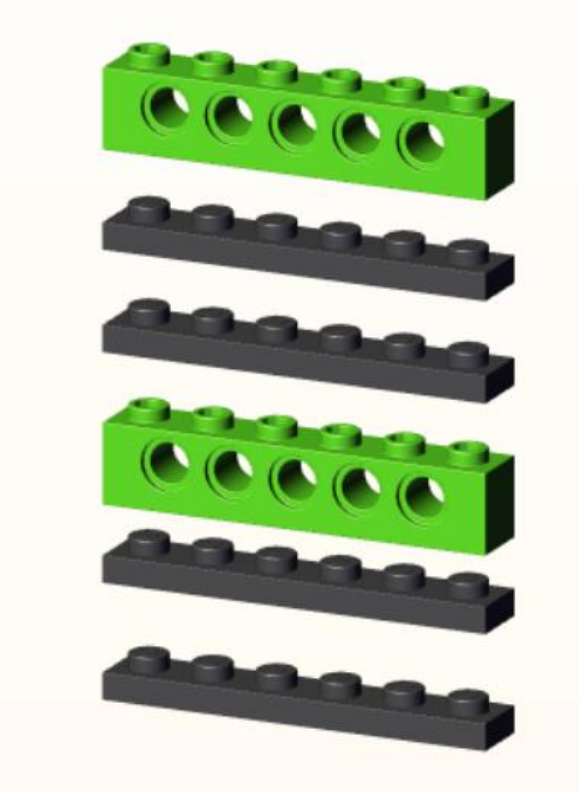
x2

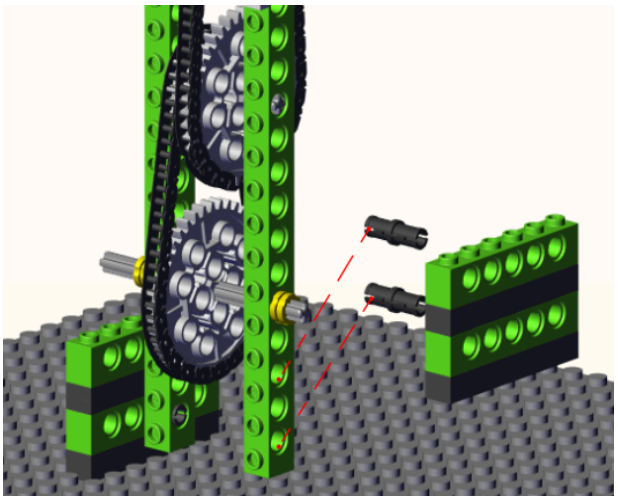


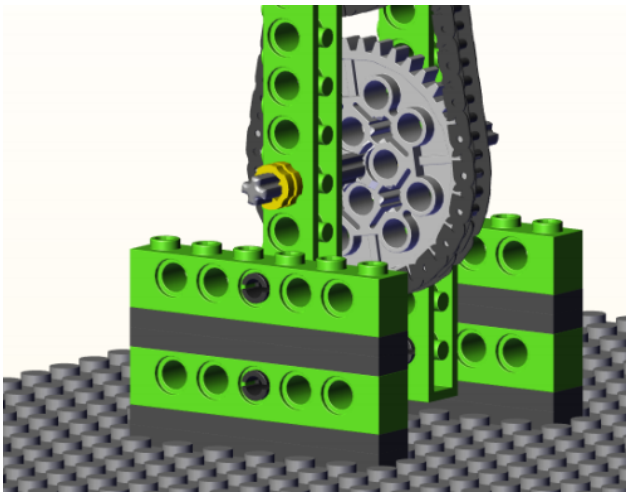
x2 (5 agujeros)

x2







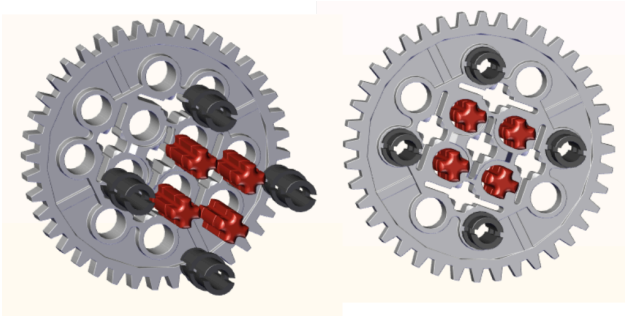


x1

x4

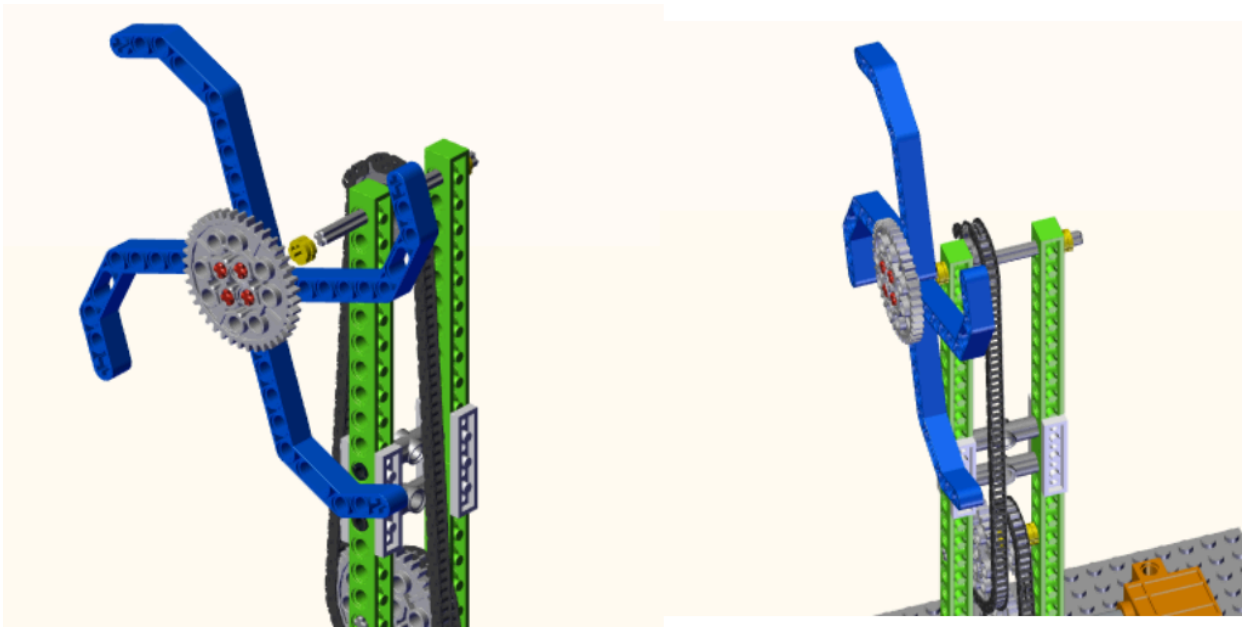
x4

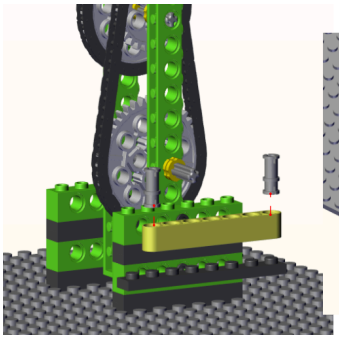
Cuidado con la posición de los agujeros

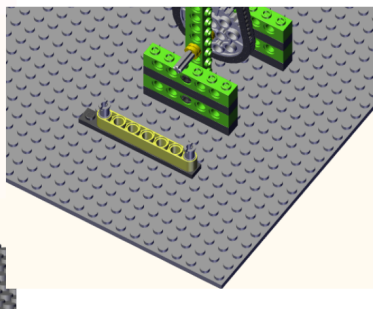



x1


x1

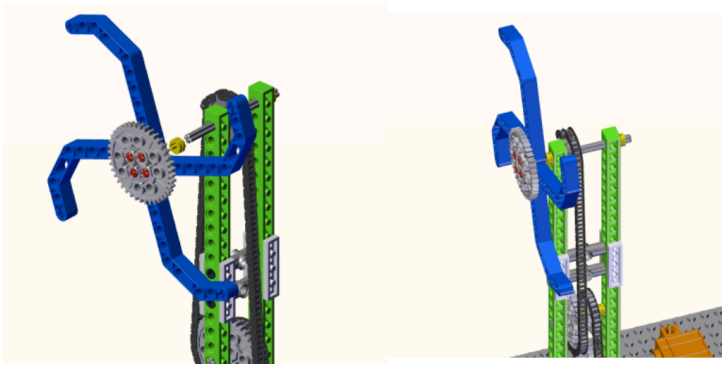







x1

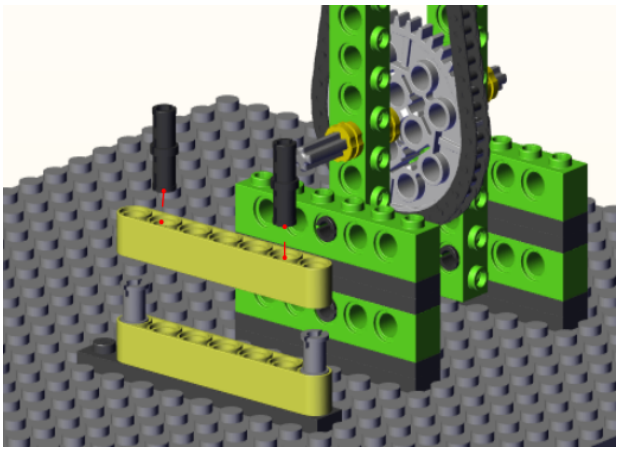

x2

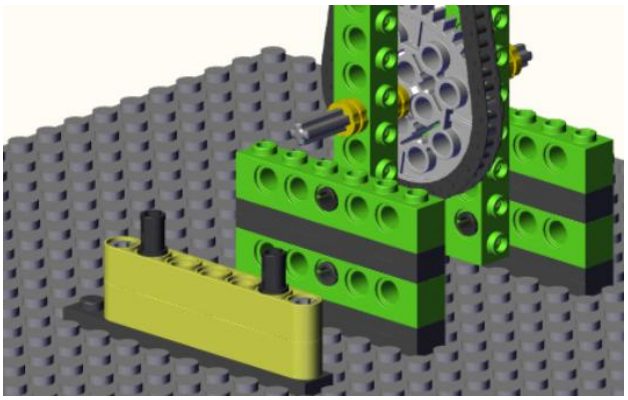



x1 (7 agujeros)

x1 (7 agujeros)

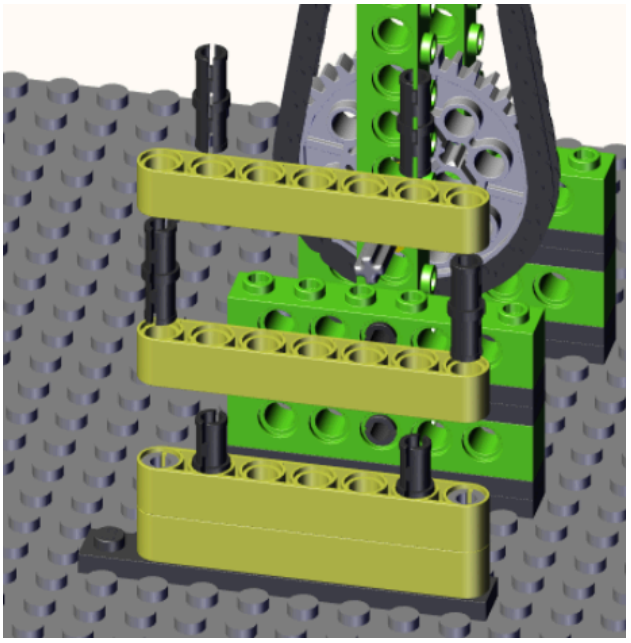
x2

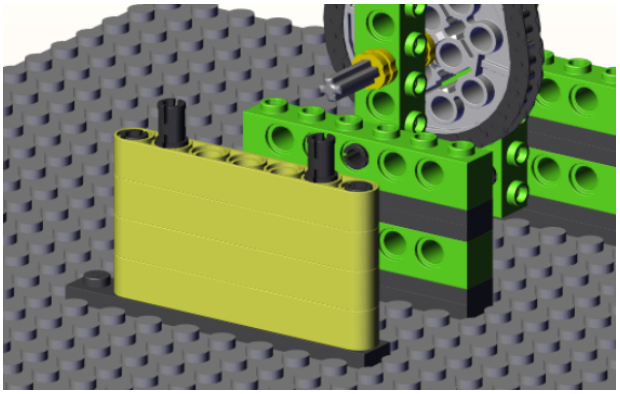


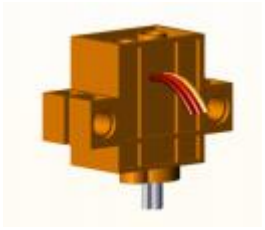


x4

x2 (7 agujeros)

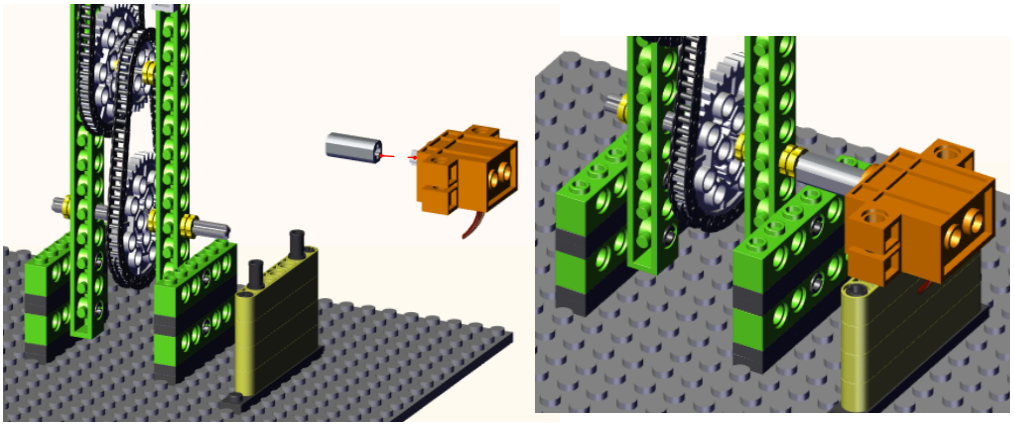






x1

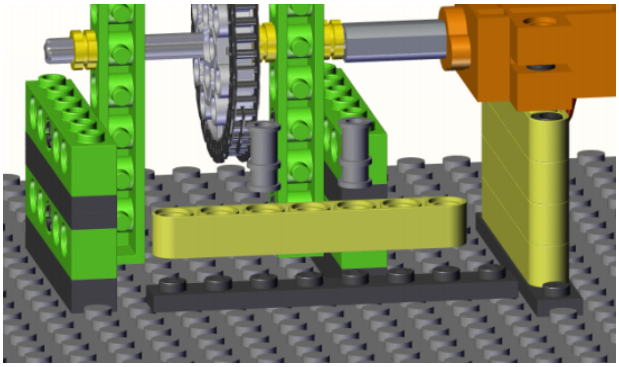
x1

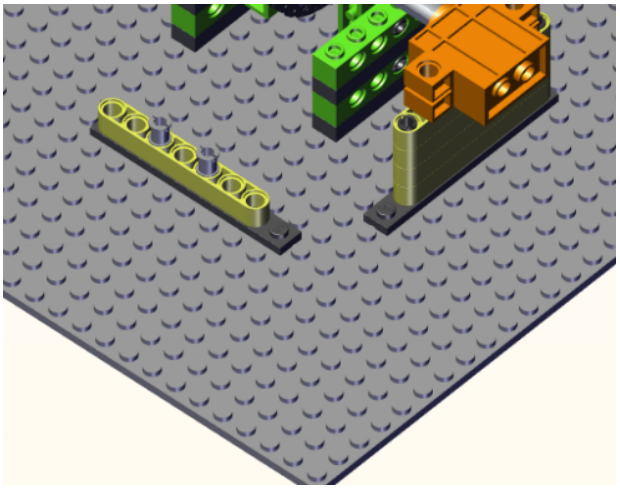


x2

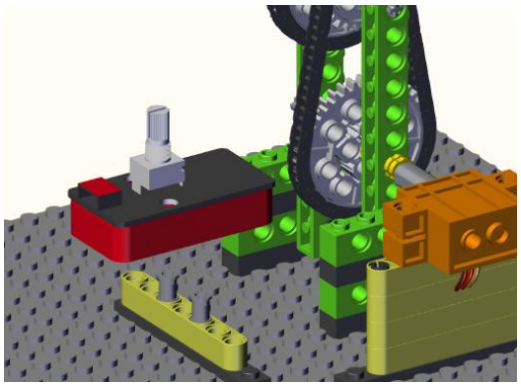
x1

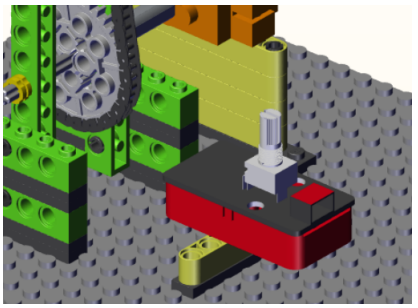
x1 (7 agujeros)

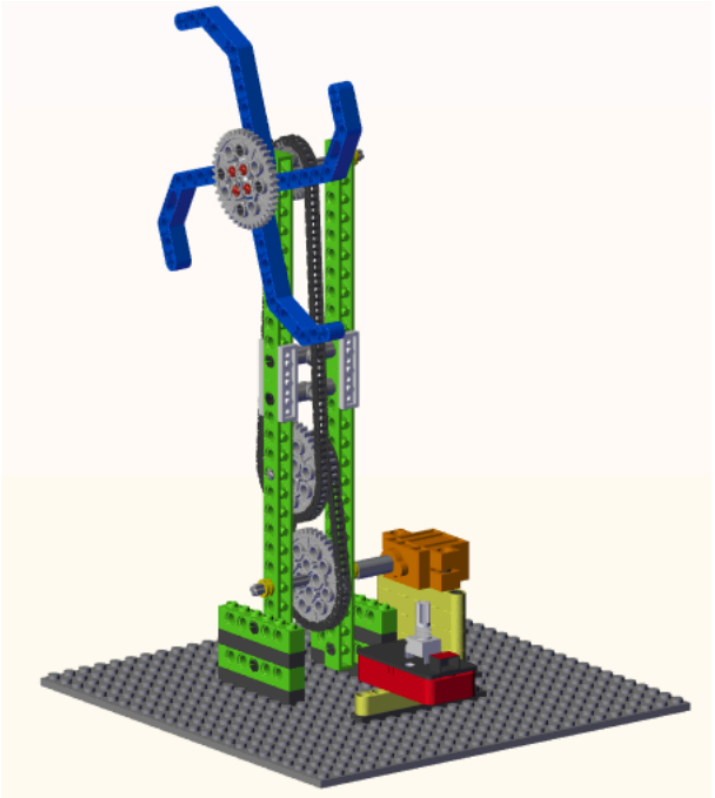




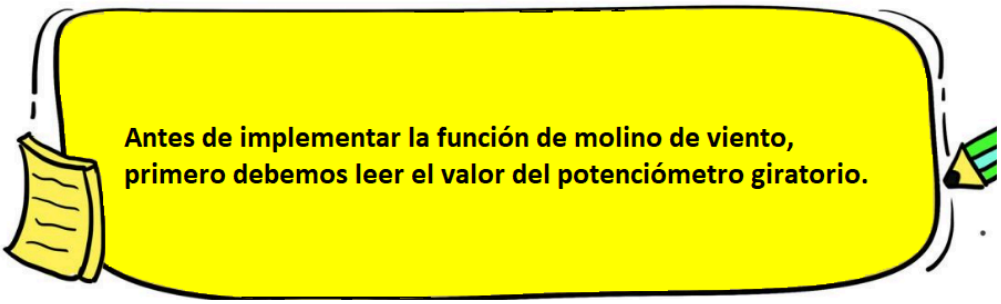
x1







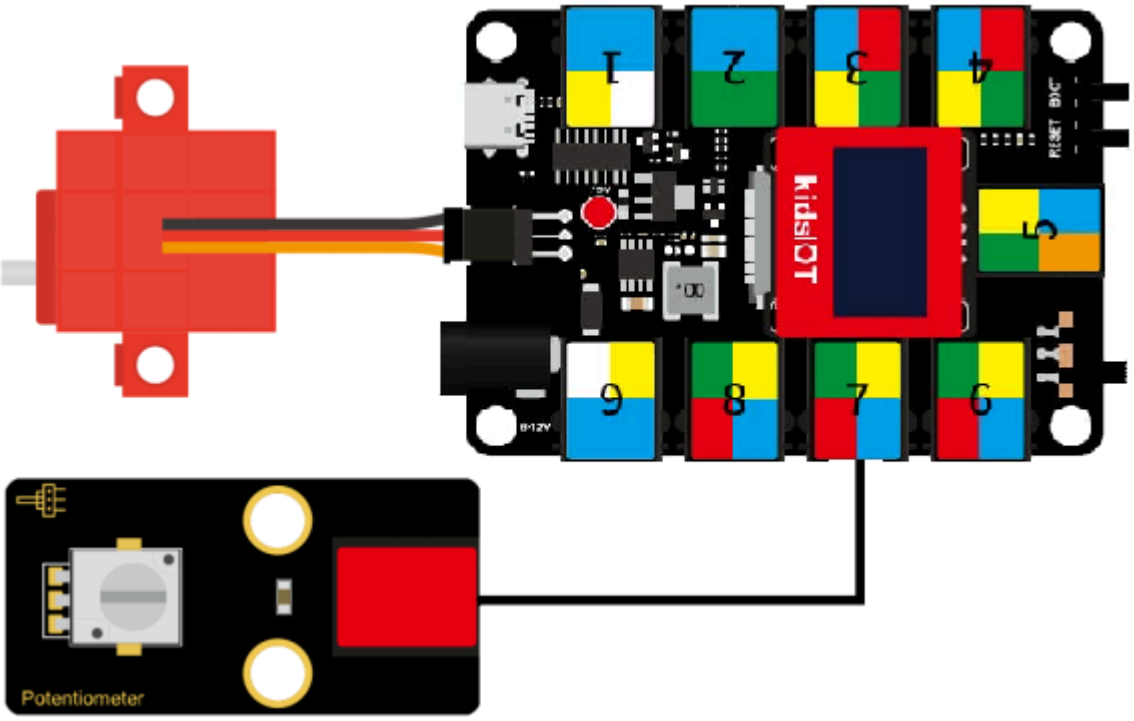
Lea el valor del potenciómetro giratorio



4. Pasos de programación

Paso 1: Diagrama de cableado

Conecte la placa base kidsIOT y la computadora mediante un cable USB, y conecte el potenciómetro giratorio a la interfaz No.7, el servo de 360° a las interfaces G, V y IO33 de la placa base. El cable marrón está conectado a G, el cable rojo está conectado a V y el cable naranja está conectado a IO33.



Paso 2: Realiza y comprueba tu programa.