## Control the Robot with 2 Motors!

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Let's try to control the robot with 2 DC motors!

Electric power of OUT of IchigoJam is weak, so you need a IC to drive motors and a power source.

\* Preparations (see also fig.1)
A battery box 1.5V x 4 with switch
A driver IC (SN754410NE)
A mini breadboard
Two DC motors

6V	1	<ul><li>16</li></ul>	6V
OUT1	2	15	OUT3
MOTOR1-1	3	14	MOTOR2-1
GND	4	13	GND
GND	5	12	GND
MOTOR1-2	6	11	MOTOR2-2
OUT2	7	10	OUT4
6V	8	9	6V

6V: Connect the red cable from the battery box and each other 6Vs

GND: Connect the black cable from the battery box, GND of IchigoJam and each other GNDs

OUT1/2/5/6: Connect OUT1/2/5/6 of IchigoJam

MOTOR1: Connect motor1 2pins controlled by OUT1 and OUT2 MOTOR2: Connect motor2 2pins controlled by OUT5 and OUT6

## \*Missions

Some wires

Step1. Type in "OUT1" (push F7 Key to STOP)

Step2. Type in "OUT33" (How about 18, 17 and 34??)

Step3. Program to move eternally front, wait, backward and wait

Step4. Program to move as a rectangle

Step5. Make the robot controlled by the keyboard

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<sup>\*</sup> Connections (see also fig.2)

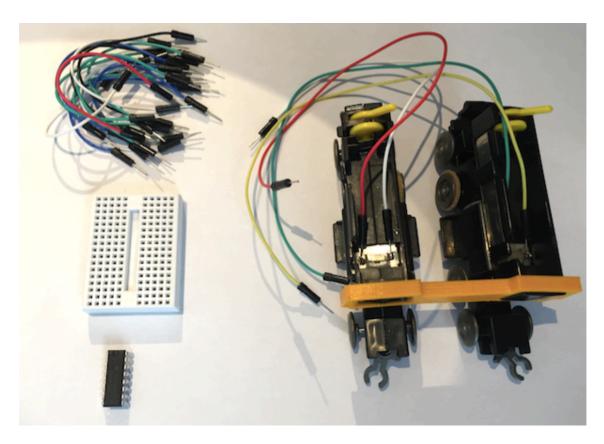


fig1. wires, a breadboard, a mortor driver and two motors (+battery box)

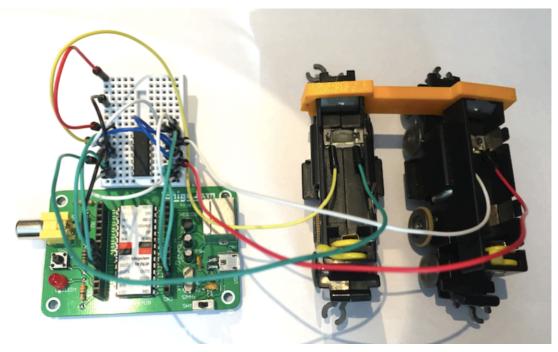


fig2. A example of connections

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