

Programming Workshop 2010 (Afternoon)

Move Until Near

<p>The image shows a sequence of three programming blocks. The first block is a 'Move' block with a green background, a gear icon, and 'CB' in the top right corner. The second block is a 'Loop' block with a green background, a gear icon, and the number '4' in the top right corner. The third block is a 'Stop' block with a green background, a gear icon, and 'CB' in the top right corner.</p>	<p>Configuration</p> <p>1st Block: Unlimited Duration 2nd Block: Distance is 25cm 3rd Block: Stop</p> <p>Try This! Make the robot stop farther away from the obstacle</p>
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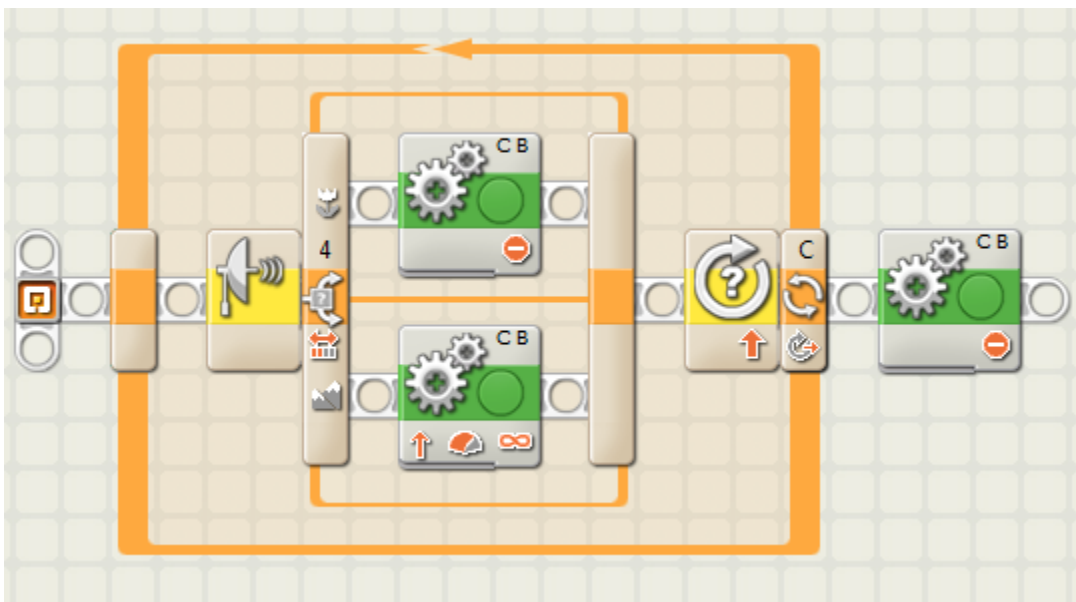
Notes:

Repeating Behaviors

<p>The image shows a sequence of programming blocks. The first block is a 'Move' block with a green background, a gear icon, and 'CB' in the top right corner. The second block is a 'Loop' block with a green background, a gear icon, and 'CB' in the top right corner. The third block is a 'Move' block with a green background, a gear icon, and 'CB' in the top right corner. The fourth block is a 'Stop' block with a green background, a gear icon, and 'CB' in the top right corner. An orange arrow indicates a loop around the second and third blocks.</p>	<p>Configuration</p> <p>Loop: 4 count 1st Move: 3 rotations 2nd Move: Point turn left, 185 degrees</p> <p>Try This! Adjust the point turn duration to turn precisely 90 degrees Go around the square two times.</p>
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Notes:

Obstacle Detection



Configuration

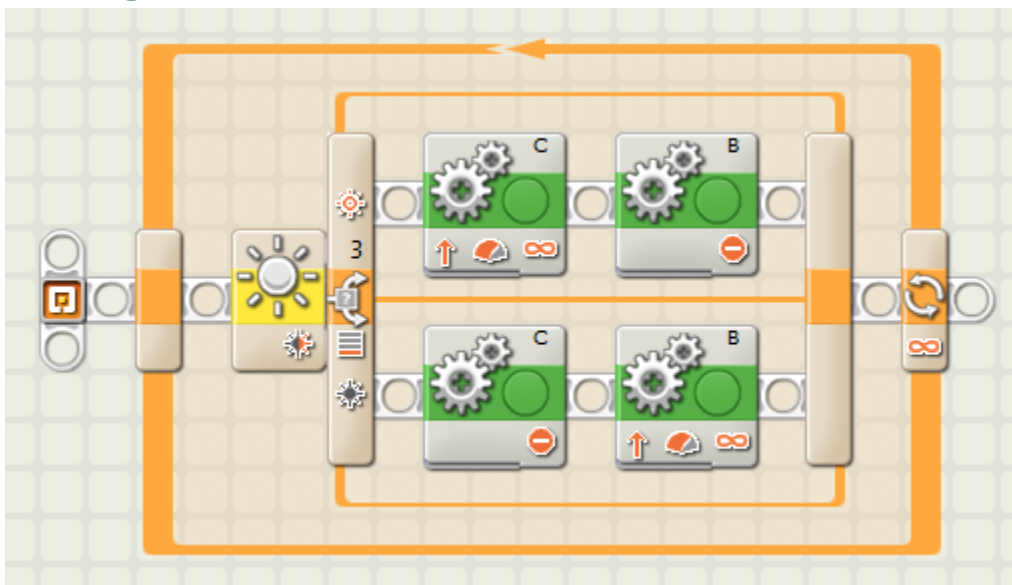
Loop: Rotation Sensor, Port C, until 4 rotations
 Switch: If less than 25cm
 Top Move: Stop
 Bottom Move: forward unlimited
 End Move: Stop

Try This!

Adjust the loop duration
 Increase or decrease the switch distance

Notes:

Line Following



Configuration

Loop: Forever

Switch: Light Sensor, set threshold

1st Top Move: C only, unlimited duration

2nd Top Move: B only, stop

1st Bottom Move: C only, stop

2nd Bottom Move: B only, unlimited duration

Try This!

Adjust the threshold

Change the "Stopped" blocks to a low power level (example: 25%)

Make the robot follow the other side of the line

Notes: