

6

Ruler with Loops

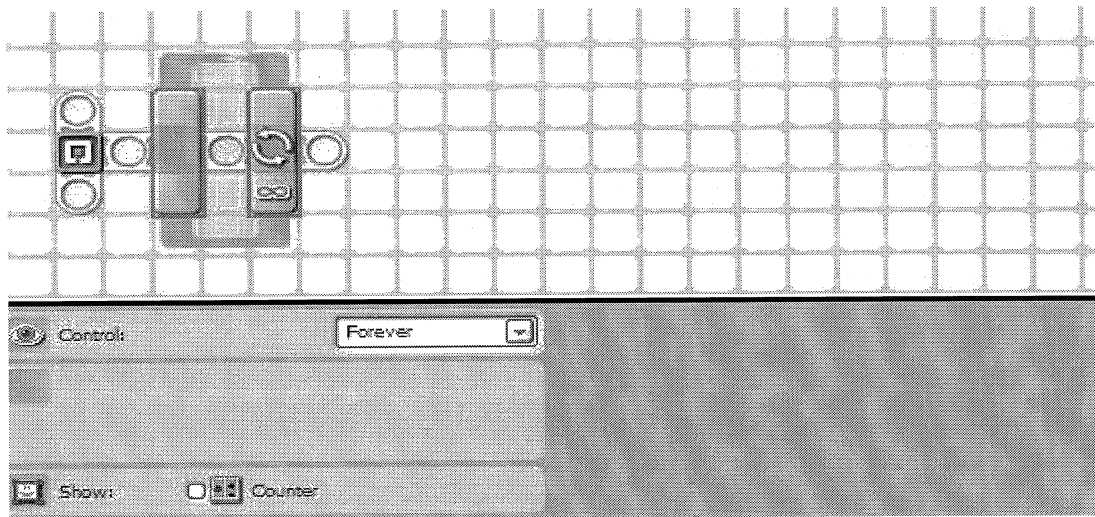
Mission: the robot will drive around the ruler without touching it using loops in the program to use less programming blocks.

Equipment:
robot

Sensors
none

Directions:

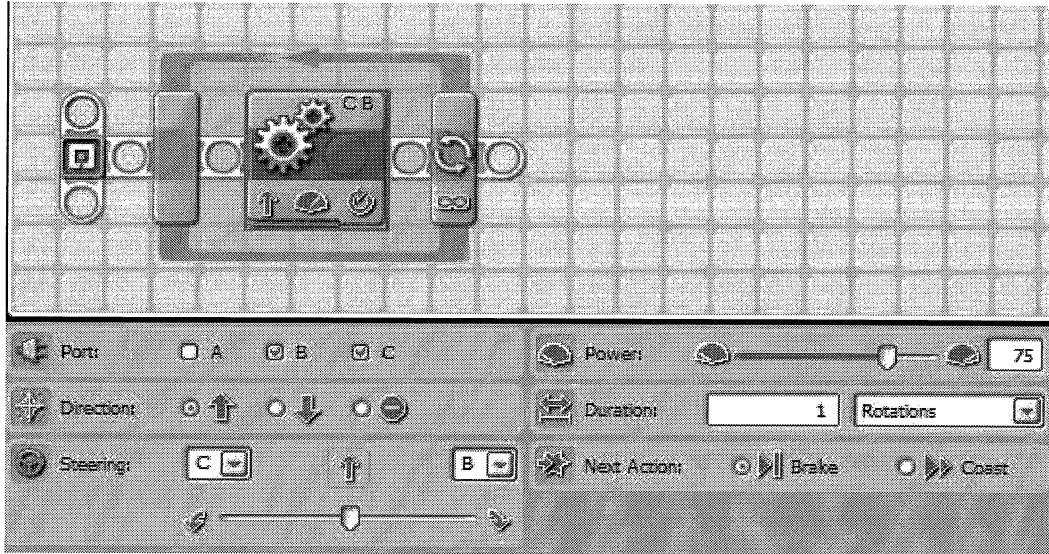
1. Place a Loop block on the program bar.



This loop will repeat over and over the program blocks you will put inside it.

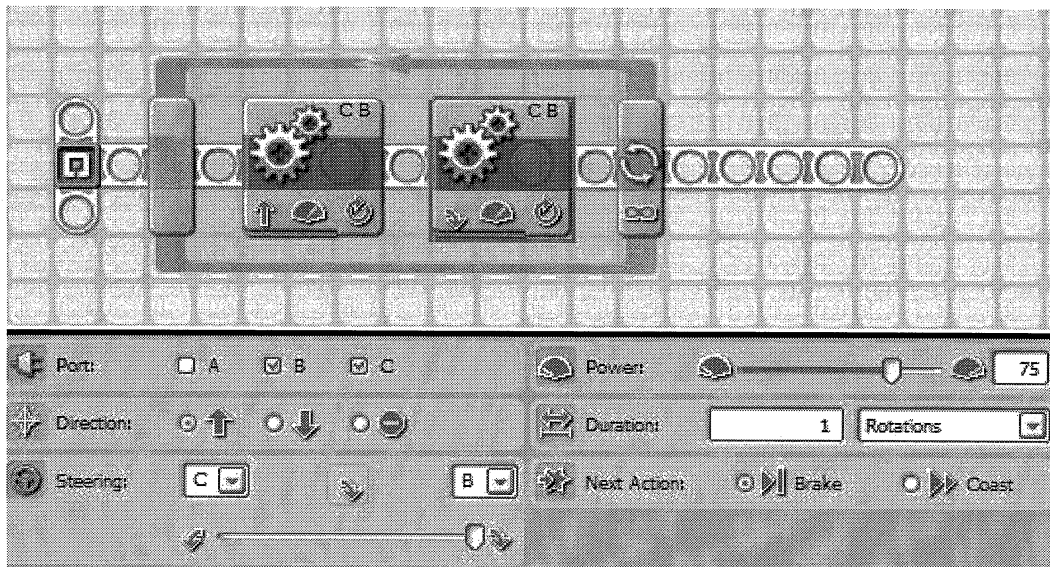
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2. Place a Move block into the Loop. Hold it over the middle of the Loop until the Loop opens up wide enough to put it in. Set the rotations of the Move block high enough to travel far enough to go past the ruler.



The move block will make the robot go forward past the end of the ruler.

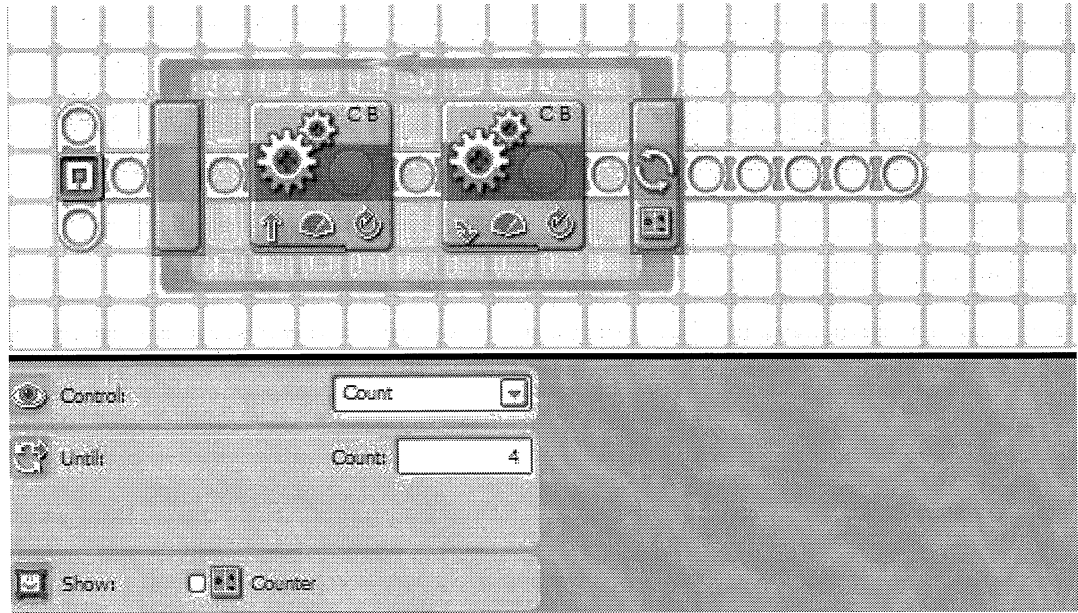
3. Place another Move block after the first one and set it to move all the way to the right on the Steering setting at the bottom left of the control panel.



This will make the robot turn. Adjust the rotations so the robot turns in a 90 degree angle.

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4. Click on the loop and set it to Count and set the count to 4. In other words, the Loop goes through the two Move blocks 4 times.



Setting the count on the loop to 4 will make the robot go up one side, turn, go past the end of the robot, turn, go down the other side, turn, head back to the starting place, and turn to face the way the robot started.

Secret to success: Use loops whenever you can because it will save you a lot of time programming. It will also keep your program a little shorter and easier to handle.

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