7 Go Hit Back

Mission:
The robot go forward until it hits the wall and then it backs up one rotation.
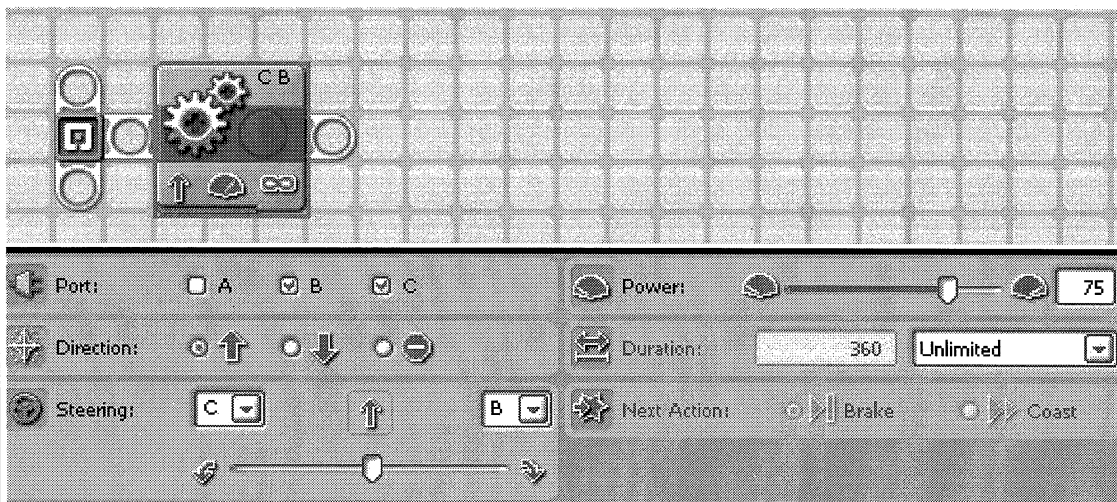

Equipment:
none

Sensors:
touch

Directions:

1. Place a move block and set the duration to unlimited. It is found on the lower right side of the illustration.
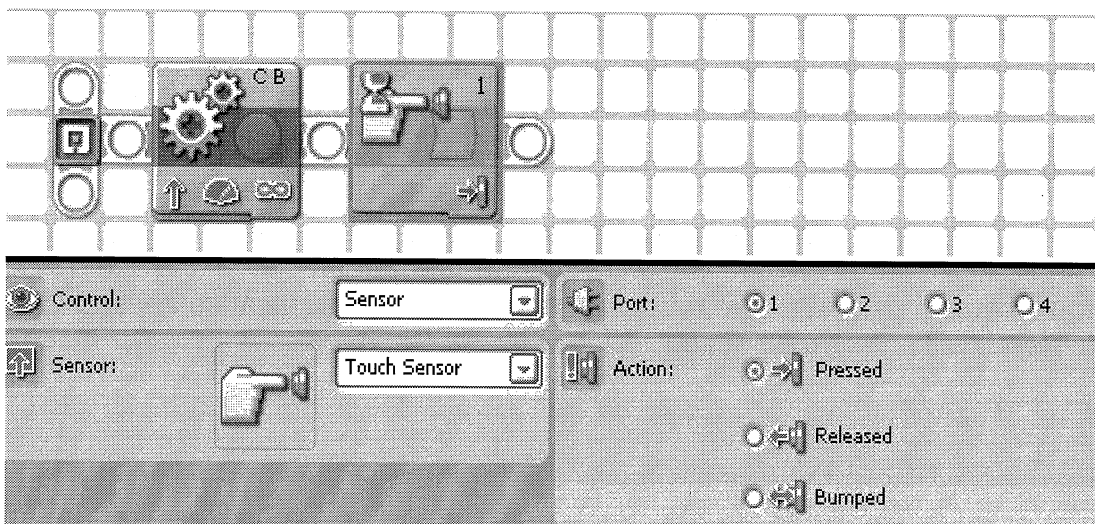

Unlimited will make the motors turn and not stop until something tells it to stop. The command to tell it to stop will be the next part of the program.

2. Place the cursor over the wait block and it will open up to show you several choices. Click on the touch wait block. It looks like a finger touching a button.
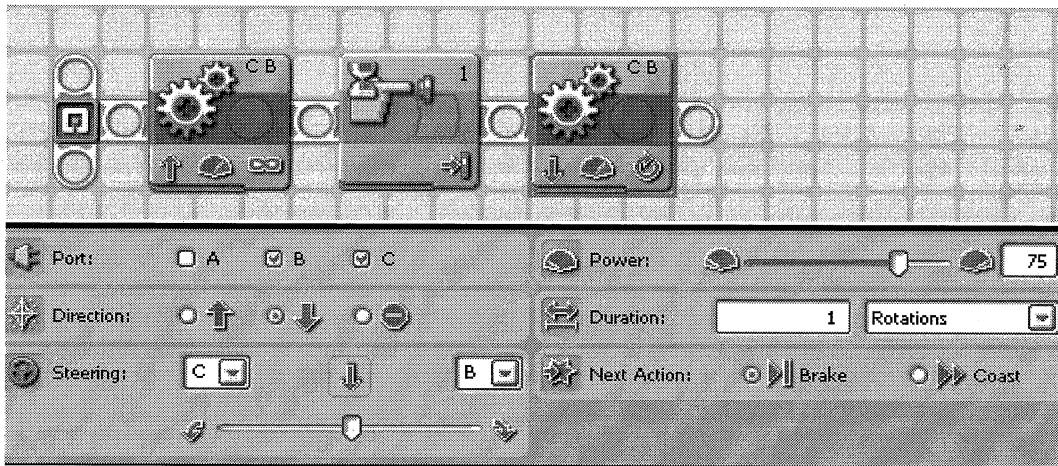
Touch
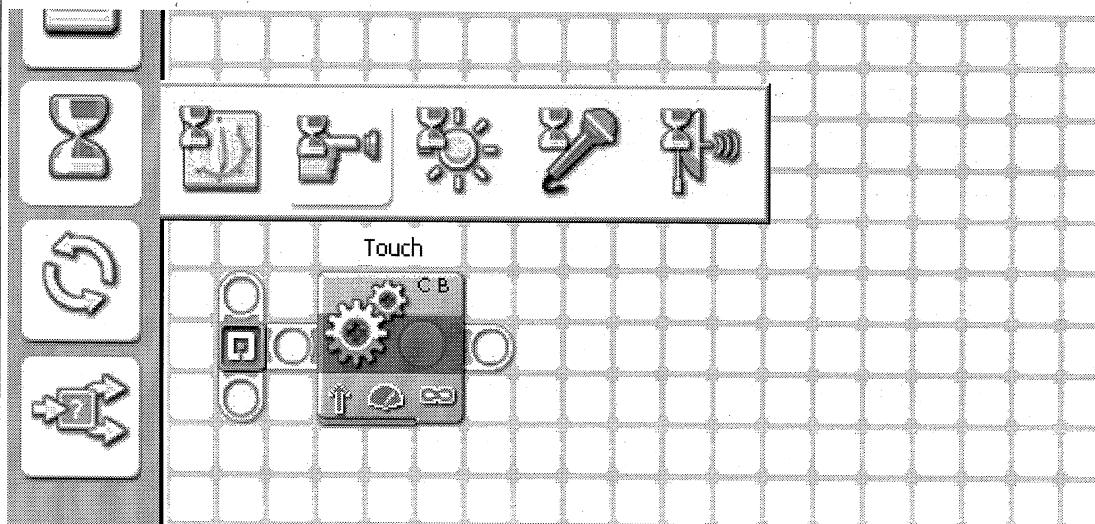
3. Place the wait block on the program bar. Notice it is set for port 1. Be sure your sensor is plugged into port 1 or that you change the port to whichever port you have the sensor plugged.

Control:	Sensor		Port:	○1	○2	○3	○4
Sensor:	Touch Sensor		Action:	○ Pressed			
				○ Released			
				○ Bumped			

This tells the robot to keep going until something presses the touch sensor. When something touches the touch sensor, this block will let the program move on to the next block.

4. Place a move block on the program bar and set if for reverse. Leave the rotations set at 1.

This block makes the robot go in reverse. So when the robot touches something, the touch block lets the program move to the next step which is to go in reverse.

About the Touch Sensor

The touch sensor has three actions:
1. Pressed means that the button is pushed and not released for at least a second.
2. Released means that the button was already pressed and now it is released.
3. Bumped means that the button is pushed and then released in less than a second.

Pressed

You will use pressed the most since you will want the robot to hit something like a wall and then do something different. The robot will roll up and push against something for a second and then it will do the next action.

Released

This could be used if the robot has the touch sensor already pushed and something releases the pressure. You could program the robot to push against a block, then, when the block is removed, the robot will do something else. Released is not used very much.

Bumped

This could be used when the robot would go by something that would push the button on the touch sensor and then release it without the robot doing anything new. It has to be touched and released in less than a second. Again, this action is not used very much either.