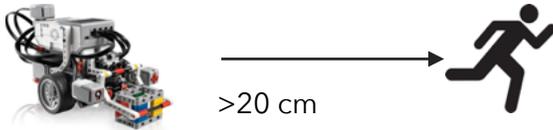


PROGRAMMING CHALLENGE:

In this lesson, you will program the Educator Vehicle robot to follow you in a straight line (but keep a certain distance away) using the ultrasonic sensor.

Constant Distance Away:

If the robot is more than 20 cm away from the person, it will move closer.

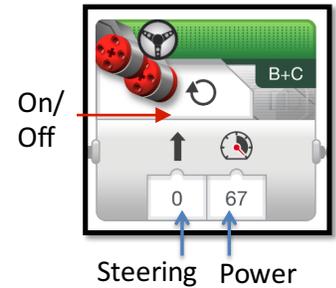


If the robot is less than 20 cm away, it will move away from the person.



BLOCKS YOU NEED:

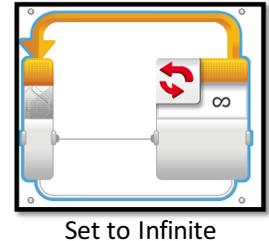
Move Steering block in "On" Mode found in the Green Programming Pallet tab



Switch block that uses the Ultrasonic Sensor in the Compare Mode (Distance = CM) in the Orange Programming Pallet tab



Loop block that repeats forever found in the Orange Programming Pallet tab



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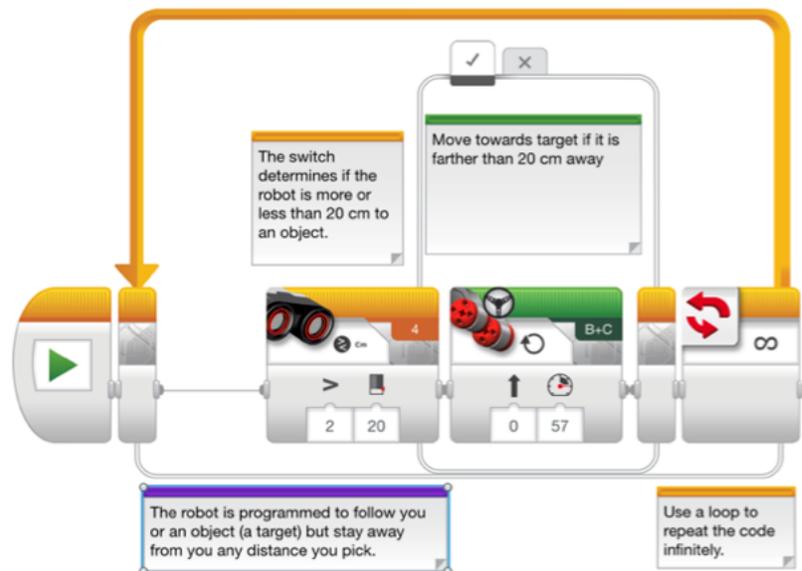
PET FOLLOWER in Four Easy Steps:

STEP 1: Start with a Switch that makes a decision based on the Ultrasonic sensor in "Compare Distance" mode.

STEP 2: Inside the Switch, use a Move Steering Block in "Motor On" mode. Make the robot move forward or back based on if the robot is more or less than 20 cm (Change the Power input to change directions).

STEP 3: Place all of the above in the Loop Block

STEP 4: Download your program. Walk in front of the ultrasonic sensor and have the robot follow you.



- ▶ In the False (X) tab, you change the Power Input on the Steering Block to -57 to make the robot move backwards (away from the person). Note: to move your robot backwards, you use a NEGATIVE Power Input.
- ▶ To move straight you leave the Steering Input as 0.