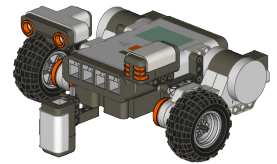


task #1 - moving with rotations

- A. make the robot move forward
- B. move forward exactly 5 rotations

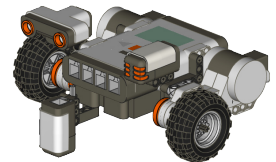


-
- C. move forward 5 rotations, then move backward 5 rotations
 - D. move forward 2 rotations, then back 1 rotation - repeating this 5 times



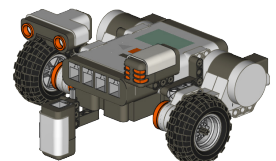
task #2 - moving and waiting

- A. make the robot move forward for 5 seconds then stop
-
- B. move forward 5 seconds, wait 5 seconds, then move back for 5 seconds
 - C. wait 5 seconds, go forward 2 seconds, - repeating this 5 times



task #3 - turning

- A. make a "spin" turn (one wheel moves forward, the other backward)
 - B. make a "pivot" turn (one wheel forward, the other stopped)
-
- C. make a "slow" turn (both wheels forward, one is faster than the other)
 - D. move forward 3 rotations, then turn completely around, then move back 3 rotations, then spin in place

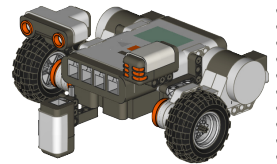


task #4 - complex turning

- A. make the robot travel in a square that is 2 feet on each side (it should end on the spot where it started)



- B. make the robot travel in a triangle
- C. go in a zig-zag with at least 6 turns

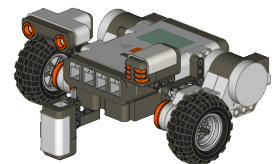


task #5 - light sensor

- A. drive to the line, then stop
- B. drive to the first line, turn, then drive to the second line, stop



- C. drive back and forth, staying inside the paw print (make at least 5 direction changes)

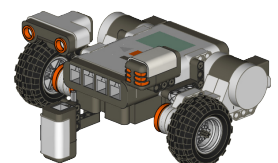


task #6 - ultrasonic sensor

- A. move forward until robot is 12 inches from the wall, then stop
- B. start at the wall, back away until you are 1 meter from the wall, then stop



- C. move forward until 3 inches from the wall, back away until 2 feet away - repeat this 5 times

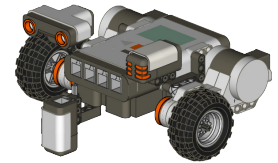


task #7 - touch sensor

- A. build the bumper and attach it to your DomaBot
- B. move forward until you hit the wall, then back up 1 rotation



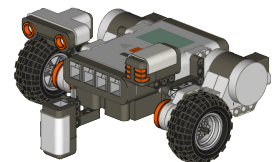
-
- C. go to a corner; move forward until you hit the first wall, then back up, turn, and do the same with the other wall, back up, and stop



challenge task - hill climb

- A. move up the hill from the starting point, and stop before you fall off the back

(hint: you MUST use the ultrasonic sensor to complete this challenge)



challenge task - line follower

- A. move around the course following the line

(hint: you MUST use the light sensor to complete this challenge)

