**ENGR 4020 Milestone 2 Homework[[1]](#footnote-1) [25 pts]**

**Due by 2/3/2020**

Write and submit a flowchart that you believe will execute the following program:

Your robot must start completely within the 12”x12”x12” starting cube. The robot should navigate to and come into contact with the back wall on the right side, then turn and contact the right base wall. Then, the robot should navigate to the left side of the playfield, touch the rear wall, and then contact the left base wall. The robot must return to the starting cube and stop with any part of the robot inside that cube.

Push buttons can be used to sense contact.

You may complete these tasks in reverse order (left side first, then right side) but the order of contact (back wall then base wall) must be preserved. It is ok to come into contact with the base wall first, but you must touch it again after touching the back wall.

1. Adapted from ENGR 450: Mechatronics by Matthew Stein, Roger Williams University [↑](#footnote-ref-1)