Implement middle sensor

1. If Left = W, Middle = W, and Right = W
2. Turn right until left sensors detects black
3. Return to normal operation

Junction determination and saved states

Changes based on physical position of middle sensor.

Stack Legend:

0: dead end

1: Chosen before

2: Not explored

1. Approach the junction
2. All three sensors detect black.
   1. Approaching T from the right or left the turn may cause the left and right to detect black but not the middle due to physical position, the check end method is used.
3. 🡪 Can assume that it is a “T” junction, fills the stack block for that junction, L S R B 🡪 2 0 2 1.
4. 🡪 Check if it is also a “+” junction.
   1. Depending on position of middle sensor, move forward and check if Left = W, Middle = B, and Right = W.
      1. IF “+” as well, modify stack block 🡪 L S R B 🡪 2 2 2 1.
5. Explore left flag to right that have the highest value. So for the “+”, choose to explore the Left, with value 2, path first and decrement that value to 1. 🡪 1 2 2 1
   1. If the left turn was made, shift all the values left 🡪 2 2 2 1, so if the robot returns to this specific junction the states are correct for it to choose from
   2. If a right turn is made, shift all the values to the right.
6. If all the values in the stack block become 0, clockwise spin infinitely so operator can acknowledge.