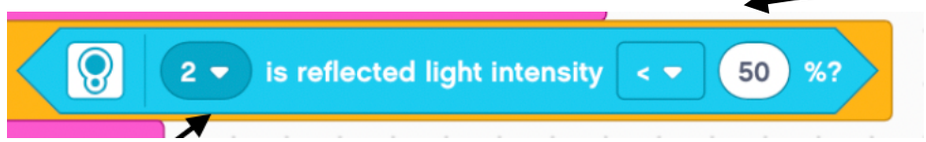
Think about it…

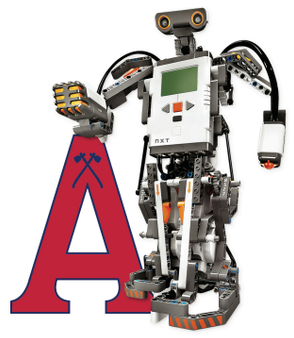
Issues when trying to find the edge of the table.

- If the robot stops too soon or too late, try adjusting your light sensor threshold.



- We only are looking for the edge of the table with one light sensor **(port 2)**

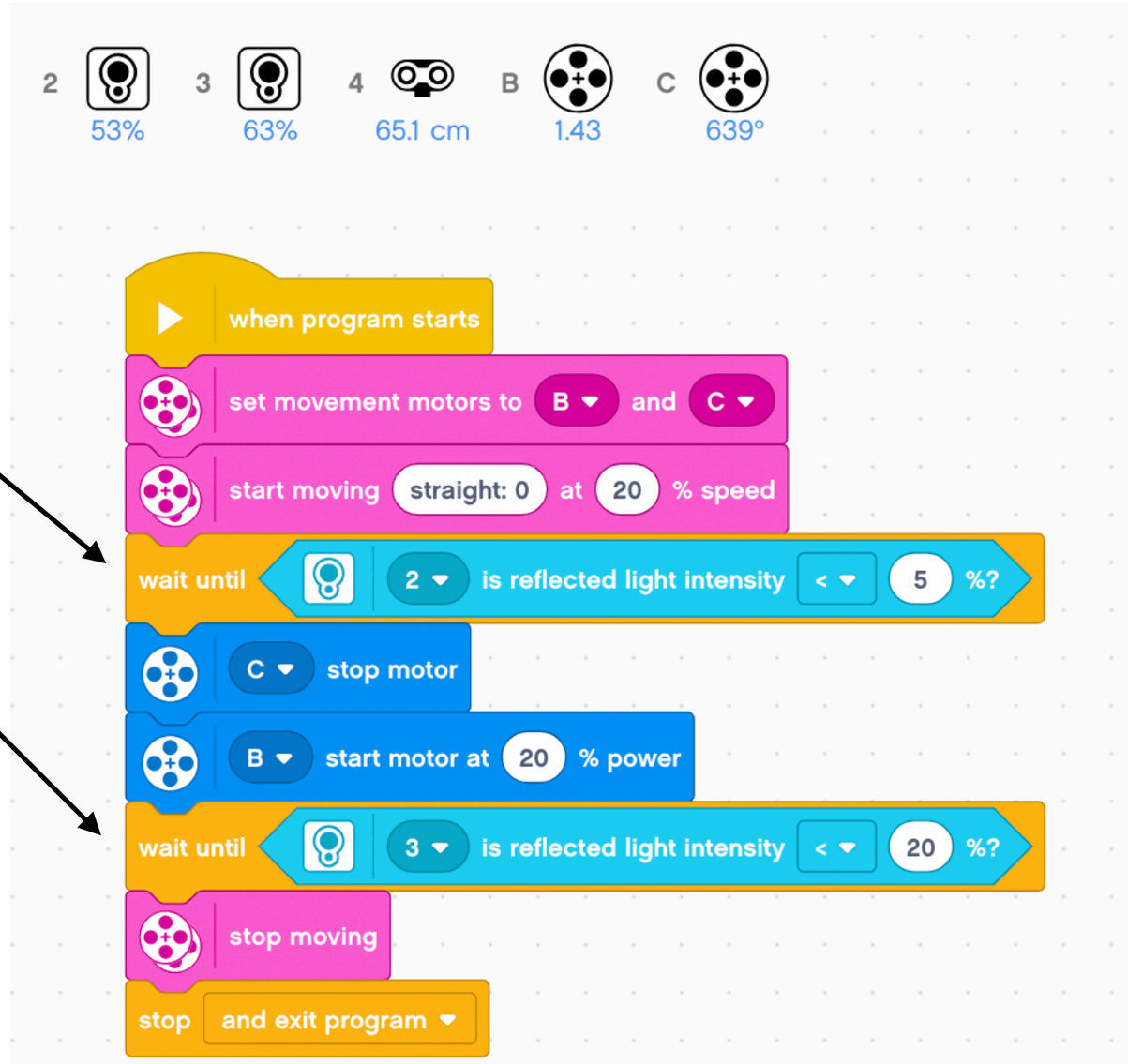
  Question: What will happen to your robot if the other colour sensor in **port 3** goes off the table first?



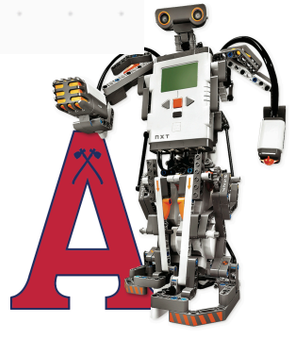
Square robot to edge of table -Part 1

Two colour sensor method

- You robot will stop when the first colour sensor finds the edge of the table.
- The motor on the same side of the robot will stop and the other motor will keep moving until the second colour sensor finds the the edge of the table and stops.
- The wait block is used twice in this example.



QUESTION:
What will happen to your robot if your robot finds the edge with the colour sensor in port 1?

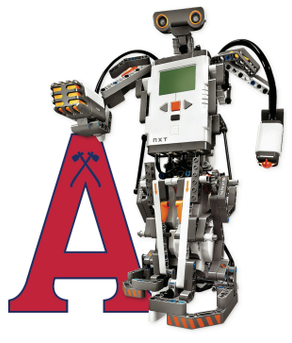


Square robot to edge of table -Part 2

Two colour sensors

QUESTION:
What will happen if your robot finds the edge with the colour sensor in port 1?

- **Answer:** your robot will stop and not be squared to to edge of table.
- **Solution**: program your robot to align if EITHER sensor detects edge of table first.
- Introduce "**or**" statements -Two conditions
- Introduce "**if - else**" conditions
  - **IF** right colour sensor sees table edge - do this action
    - **Else** - do another action



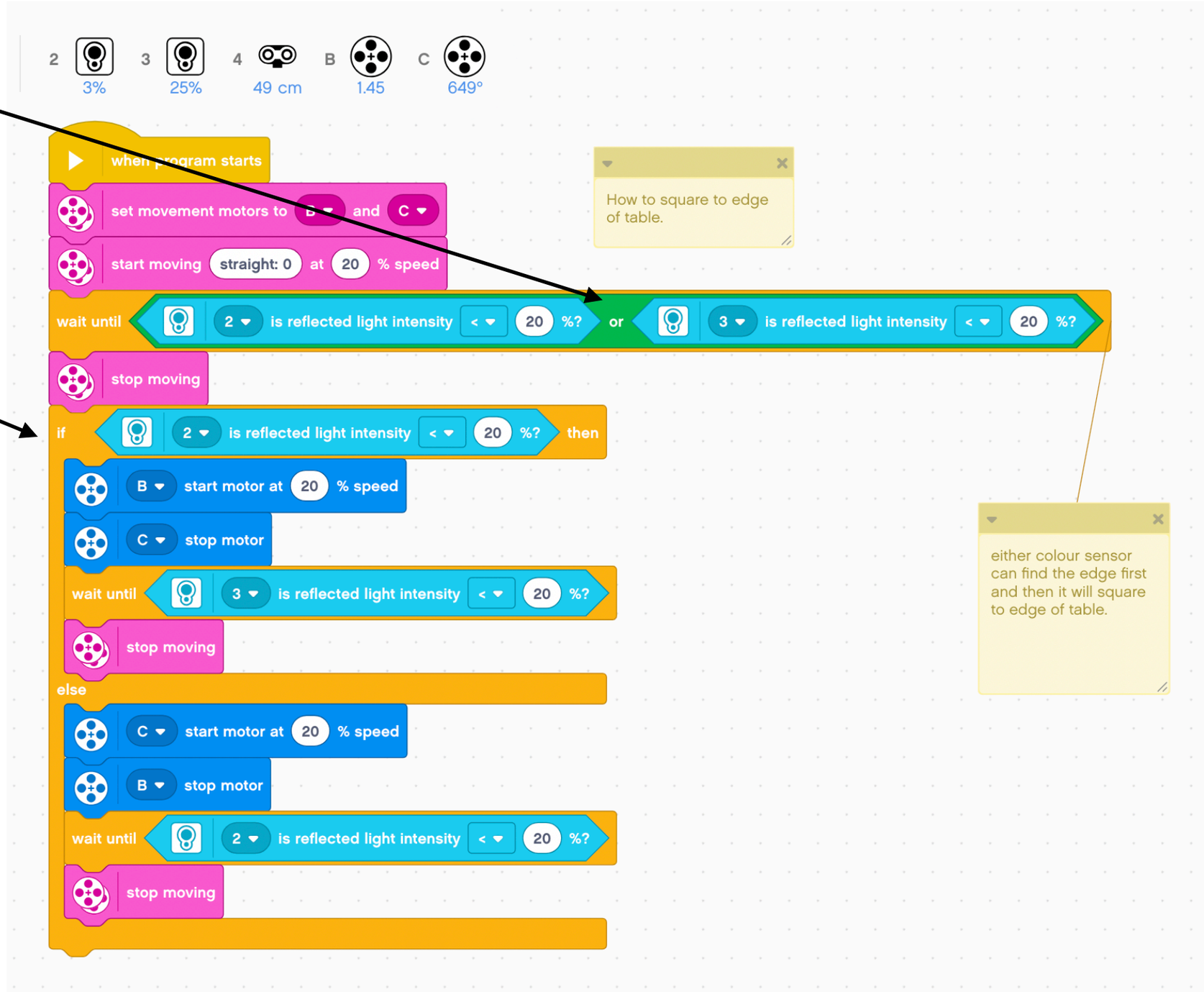
Robot aligns to edge of table no matter which sensor finds the edge first.

OR statement

Robot will stop moving when either colour sensors finds the edge of the table.

IF ELSE condition

- You want your robot to align to the table edge but you won't know which colour sensor finds the edge first.
- Your robot needs to consider the options it has based on which colour sensor finds the edge first.
- What happens if your left colour sensor finds the edge first?
  - Your robot needs to stop the left motor and move the right motor UNTIL the right colour sensor also finds the edge.
- What happens if your right colour sensor finds the edge first?
  - Your robot needs to stop the right motor and move the left motor UNTIL the left colour sensor also finds the edge.



Can you see how using these new statements "OR" & "IF ELSE" allows your robot to be more precise?