

Push bottle off table

Think about it...

You want to push the bottle off the table but your robot has to stay on the table.

- You know how to find the bottle using the ultrasonic sensor
- You know how to stay on the table using the colour sensor(s)
- How will you combine these two tasks to push the bottle off the table **AND** make sure your robot stays on the table?



Push only the Bottle Off Table

```
when program starts
  set movement motors to B and C
  start moving straight: 0 at 30% speed
  wait until 4 is distance < 5 cm?
  stop moving
  wait 2 seconds
  set movement motors to B and C
  start moving straight: 0
  wait until 2 is reflected light intensity < 20%? or 3 is reflected light intensity < 20%?
  stop moving
  if 2 is reflected light intensity < 20%? then
    B start motor at 20% speed
    C stop motor
  else
    C start motor at 20% speed
    B stop motor
  wait until 3 is reflected light intensity < 20%?
  stop moving
  stop and exit program
```

Follow the code.

1. Robot drives until it finds the bottle with ultrasonic sensor.
2. Robot pauses for 2 seconds - this is to show you that the program is working.
3. Robot starts moving to push robot off table.
4. Robot uses colour sensor program you learned to stay on the table.
5. Robot squares to the edge of table and stops.

either colour sensor can find the edge first and then it will square to edge of table.

