First, let’s test the robot’s distance sensors, which help it look for obstacles. Write and run the code below to change the robot’s face lights when it sees something in front of or behind it.

• Which part of the code is related to the front sensor? Which is related to the back sensor?

```
events.whenObstacle(Obstacles.Center, ObstacleState.Seen, function () {
  front = true
  actions.setFacePattern("1110000011", 255)
})

events.whenObstacle(Obstacles.Back, ObstacleState.Seen, function () {
  back = true
  actions.setFacePattern("0001111100", 255)
})
```
Now let’s use two variables in our code. The variable front will keep track of whether the robot has seen something in front of it, and the variable back will keep track of whether the robot has seen something behind it.

```javascript
let front = true
actions.setFacePattern("11100000111", 255)

let back = true
actions.setFacePattern("0001111100", 255)
```

To make the sensors unlock the secret message, we need to write code that checks whether both sensors have been triggered.

Let’s design a function called checkRequirements that plays a sound if both front and back have been set to true. We’ll call the function every time the robot sees something in front of or behind it.
There are many ways to make this program unique. Try these ideas:

- Record your own custom sound or message when both the front and back sensors are triggered.
- Change the program to detect sound sensors.
- Alter how the robot behaves when seeing something (e.g., use wheel or head movements).
- Create additional requirements to unlock the message.
- Design a way for the robot to require sensor inputs in a specific order.

What if there were several different messages to unlock in one program?

For more info, visit: makewonder.com/cue_the_cleverbot