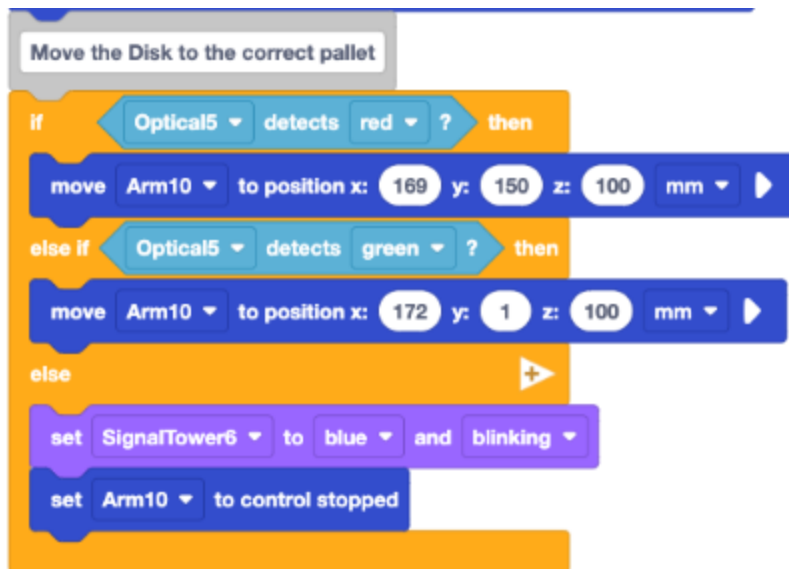


Check Your Understanding

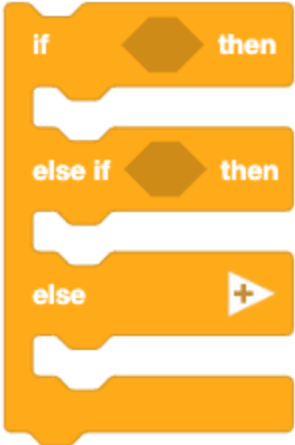
Unit 3 - Lesson 4: Coding with the Else If Block

1. Based on the code snippet shown here, if the Optical Sensor detects red, which of the following would occur?
- The 6-Axis Arm would move to position (169, 150, 100)
 - The 6-Axis Arm would move to position (172, 1, 100)
 - The Signal Tower would blink blue and the 6-Axis Arm would come to a controlled stop
 - The 6-Axis Arm would move to the safe position



2. Which of these blocks enables you to check for multiple conditions within the same block?

a. The block is a simple "if-then" block with a single condition slot and a single action slot.	b. The block is an "if-then-else" block, allowing for two different actions based on a single condition.
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c. 	d. 
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3. Based on the code snippet shown here, if the Optical Sensor detects green, which of the following would occur?

- The 6-Axis Arm would move to position (169, 150, 100)
- The 6-Axis Arm would move to position (172, 1, 100)
- The Signal Tower would blink blue and the 6-Axis Arm would come to a controlled stop
- The 6-Axis Arm would move to the safe position

```

Move the Disk to the correct pallet
if Optical5 detects red ? then
  move Arm10 to position x: 169 y: 150 z: 100 mm
else if Optical5 detects green ? then
  move Arm10 to position x: 172 y: 1 z: 100 mm
else
  set SignalTower6 to blue and blinking
  set Arm10 to control stopped
  
```

4. Based on the code snippet shown here, when is the 'Optical Sensor detect green' condition checked?

- Every time the project is run, no matter what.
- Never, that is not a condition to be checked in this project.
- Only if the 'Optical Sensor detects red' condition reports as false.
- Any time the 6-Axis Arm moves to the position (172, 1, 100).

```

Move the Disk to the correct pallet
if Optical5 detects red ? then
  move Arm10 to position x: 169 y: 150 z: 100 mm
else if Optical5 detects green ? then
  move Arm10 to position x: 172 y: 1 z: 100 mm
else
  set SignalTower6 to blue and blinking
  set Arm10 to control stopped
  
```

5. Based on the code snippet shown here, if the Optical Sensor detects neither red nor green (blue), which of the following would occur?

- a. The 6-Axis Arm would move to position (172, 1, 100)
- b. The Signal Tower would blink blue and the 6-Axis Arm would come to a controlled stop
- c. The 6-Axis Arm would move to position (0, 172, 0)
- d. The 6-Axis Arm would move to position (169, 150, 100)

