

Debugging Fun Sensor1 Solution

Scenario: Maxine wrote the following code for her Human Sensor Project. She wants each possible sensor value to call one of the four light pattern functions:

Actual Buggy Code Behavior:

Everything works except nothing happens for the values 900, 750, and 500

Misconceptions: Ranges. They didn't use \geq or \leq to include all the possible numbers

Solution:

```
loop() {
  sensorValue = analogRead(sensor);
  if (sensorValue >= 900) {
    lightPattern1();
  }
  if (sensorValue >= 750 && sensorValue < 900) {
    lightPattern2();
  }
  if (sensorValue >= 500 && sensorValue < 750) {
    lightPattern3();
  }
  if (sensorValue < 500)
  {
    lightPattern4();
  }
}
```

Notes:

This is one solution. You could also change every "<" to "<=" instead.