# Debugging Fun Sensor2 Solution

**Scenario:** Pablo wrote the following code for his Human Sensor Project.  He wants each possible sensor value to call one of the four light pattern functions:


Actual Buggy Code Behavior:

   Everything works except nothing runs if the sensorValue is in the range >= 600 AND < 800


Misconceptions: Ranges.  He didn't program his ranges for every possible value of sensorValue.

Solution:

```
loop() {
    sensorValue = analogRead(sensor);
      if (sensorValue >= 900) {
          lightPattern1();
    }
      if (sensorValue >= 700 && sensorValue < 900) {
        lightPattern2();
      }
      if (sensorValue >= 500 && sensorValue < 700) {
        lightPattern3();
    }
      if (sensorValue < 500) {
        lightPattern4();
    }
}
```


Notes: Solutions may vary.  This is one possible way to fix it.