Debugging Fun Sensor3 Solution

Scenario: Harume wrote the following code for her Human Sensor Project.

She wants to see:

- lightPattern3() for sensor readings greater than or equal to 1000
- lightPattern2() for readings between 750 and 1000 including 750
- lightPattern1() for readings between 500 and 750 including 500
- lightPattern4() for readings below 500

Actual Buggy Code Behavior:

- lightPattern1() for sensorValue >= 500
- lightPattern4() for sensorValue < 500

Misconceptions: if-else-if chain. When using an if-else-if chain with ranges, you need to start with the most exclusive condition first then get subsequently less exclusive. The order of the conditions matter.

Solution:

```
loop() {
    sensorValue = analogRead(sensor);
    if(sensorValue >= 1000) {
        lightPattern3();
    }
      else if(sensorValue >= 750) {
        lightPattern2();
      }
      else if (sensorValue >= 500) {
        lightPattern1();
      }
      else {
        lightPattern4();
      }
}
```