Debugging Fun Sensor3

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

Help her debug her code:

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

1. **Predict:** Looking at the code snippet above, what do you think the behavior might be?

2. **Test:** Discuss with another group or test out the code. What does the code actually do?

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3. **Identify the bug:** Why do you think the code behaves this way instead of as intended?

4. **Revise:** How might you fix the code? Write your revised code or edit the code snippet at the top to fix the bug.

5. **Retest:** Test your solution and revise again if necessary.

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