**Step 5: Test and Refine the Solution (Debug and Verify)**

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| **Scenario** | **Input Conditions** | **Expected Output** | **Result** |
| Pet eats as expected | Time matches schedule, bin has food, bowl weight increases | Dispense food, log success, no alert | Pass |
| Pet does not eat | Time matches schedule, bin has food, bowl weight unchanged | Dispense food, send "pet not eating" alert | Pass |
| Food bin empty | Time matched schedule, bin empty | Send "Bin empty" alert, no dispensing | Pass |
| Not feeding time | Time does not match schedule | No action taken | Pass |

**Discussion:**

* The feeder logic worked as expected in all test cases.
* Alerts were sent only when necessary
* Feeding only occurred at the correct time and when food was available.

**Improvements**

* Add early warning when food bin is low.
* Allow adjustable wait time before checking if pet has eaten.
* Store more feeding history if possible.