**STEP 4 – Implementing the Solution (Word Coding)**

1. **System Initialization**
   * Turn system ON.
2. **Feeding Time Check**
   * If F-TIME = FALSE, then wait until F-TIME = TRUE.
   * If F-TIME = TRUE, proceed to next step.
3. **Food Level Check**
   * If F-LEVEL = FALSE (i.e., food level ≤ 15 cm), then:
     + Set DISPENSE = FALSE.
     + Send ALERT\_F-LEVEL: "Food Level low. Please fill tank."
     + Wait for next F-TIME = TRUE.
   * Else if F-LEVEL = TRUE (food level is sufficient):
     + Set DISPENSE = TRUE.
     + Activate servo motor to dispense food.
4. **Wait Period**
   * Wait for 10 minutes.
5. **Food Bowl Weight Check**
   * If F-WEIGHT = FALSE (i.e., weight ≤ 150g), then:
     + Send ALERT\_F-WEIGHT: "Pet didn't eat sufficient amount of food. Pet monitoring advised."
   * Else:
     + Proceed.
6. **Auto-Off Check**
   * If AUTO-OFF = TRUE, then turn system OFF.
   * Else, wait for next F-TIME = TRUE.