# IIT ASSIGNMENT - 1

## The Problem Solving Process

**STEP 4** - Implement The Solution (Word Coding)

Word Code for Automated Pet Feeder

START SYSTEM
1. Initialize system
   Power ON
   Load feeding schedule (e.g., 08:00 AM, 06:00 PM)

2. LOOP: Monitor continuously
   2.1 Get cur_time from Real-Time Clock
   2.2 IF cur_time == feeding_schedule THEN
         a. Check food level
            IF food_lev = EMPTY
                SEND ALERT ("Food bin empty")
                LOG event ("Feeding failed as no food")
                SKIP feeding
                    RETURN
            ELSE
               ACTIVATE servo_motor
               DISPENSE food into bowl
               LOG event ("Food dispensed successfully")

      b. Start 10 mins monitoring timer
      c. WHILE timer not expired
            Measure bowl_weight every 1 minute
            IF bowl_weight decreases
                LOG ("Pet is eating")
                BREAK
         END WHILE

      d. IF after 10 minutes bowl_weight has not changed
            SEND ALERT ("Pet not eating")
            LOG event ("Feeding unsuccessful as pet not eating")

   2.3 ELSE
         Continue waiting and monitoring system

3. Repeat LOOP indefinitely

END SYSTEM