Word Code

```
START PROGRAM
SET feed_time TO "08:00"
SET bowl_empty_limit TO 10 grams
SET max_retries TO 3
REPEAT FOREVER:
   current_time = CHECK CLOCK
   IF current_time == feed_time:
      hopper_level = MEASURE HOPPER
      IF hopper_level is EMPTY:
         SOUND BUZZER
         SEND ALERT "Hopper Empty"
         CONTINUE TO NEXT LOOP
      END IF
      SET try_number TO 1
      WHILE try_number ≤ max_retries:
         SPIN MOTOR for 2 seconds
         WAIT 5 seconds
         bowl_weight = MEASURE BOWL
         IF bowl_weight ≥ bowl_empty_limit:
            SEND ALERT "Feeding Successful"
            BREAK LOOP
         ELSE:
            INCREASE try_number BY 1
         END IF
      END WHILE
      IF try_number > max_retries:
         SOUND BUZZER
         SEND ALERT "Dispense Jam"
```

Sequence

Sequence of tasks

- Suitable explanations

Start

1. Make sure the power is and food dispenser is functional
2. Make sure feeding time is set to correct time (e.g 8am)M

Main Loop

1. If feeding time does not match RTC go back to step 3 until the clock matches feededing time
2. When it is feeding time proceed to step 4

Check food hopper

a. If food hopper is empty

i. Send a message to the buzzer to sound alarm
ii. Write a message on the dashboard
iii. Go back to step 3 until the error is resolved

Release food

set to try=1

While try to less than 3

Wait 10 seconds for food to settle

Measure the bowls weight

i. Attempt to disperse the pet food into the bowl
   Wait 10 seconds for food to settle in the bowl
   Weigh the bowl
   If the bowl is more than 10 grams than original weight tell the dash board “feeding successful”
   Proceed to step 4

   If bowl is less then 10 grams

   Proceed to attempt 2 and try again until attempt 3

After 3rd Error

Make a buzzer Alarm alerting staff

Display Food Jam

Go back to step 3

IF MOTOR STILL FAILS

7. If after 3 tries the bowl is still empty:
   a. Make buzzer beep
   b. Tell the dashboard “Food jam”
   c. **Go back to step 3**.