

UNIVERSITY OF CANBERRA

INTRODUCTION TO INFORMATION TECHNOLOGY (4478/8936)

Assignment 1: The Solving Problem Process.

Step 2: Organise and Describe the Data

Input Table

<i>Input</i>	<i>Type</i>	<i>Value</i>	<i>Purpose</i>
Clock	Time	8:00	Feeding time (morning)
Food bin and bowl sensor	Boolean (Yes/No)	Yes	Monitors if there is food in it
Food bowl weight sensor	Number (grams)	500	Monitors if pets have eaten or not

Output Table

<i>Output</i>	<i>Type</i>	<i>Values</i>	<i>Purpose</i>
Servo motor signal	Action	Rotate for 4 sec	Puts fixed amount in the food bowl
Alerts	Message	Food not eaten	Notify the staffs the problem

Values and Operational Constraints:

- **Feeding Times:** 08:00 and 17:00
- **Bowl Capacity:** 800 grams.
- **Food Dispensed per Feeding:** 500 grams.
- **Monitoring Window:** If the food bin weight does not change within 60 minutes, send an alert.
- **Food Bin Constraint:** Bin must have at least one portion available. Otherwise, alert “No food available.”