Name: Emir Dincer
Class: ECO 32500 - Python for Business Analytics
Date Due: 11/22/2024

HW 9: Feed the pet

1. **Identify the problem, metric, be specific**
   - **Problem:** Your pet needs to be fed (Objective: provide the appropriate amount and type of food to ensure your pet stays healthy and satisfied).
   - **Question:** What is the best way to feed your pet efficiently while meeting its nutritional needs?
   - **Why the question:** Feeding your pet correctly ensures their health and happiness and avoids issues like overeating, underfeeding, or feeding inappropriate food.
2. **What do I need to know to answer the question?**
   - **Action point:** Understand your pet's diet based on its species, size, age, and any health considerations.
   - **What needs collecting:**
     - Type of food (dry, wet, or fresh food appropriate for your pet).
     - Feeding schedule (how often and at what times the pet needs to eat).
     - Portion size (measured in cups, grams, or cans based on your pet's needs).
   - **Beginning data:** Have the pet's food and feeding equipment (e.g., bowl, scoop, or dispenser) ready.
   - **Collect data for:** Ensuring the food meets the pet's nutritional requirements and is free from allergens or harmful ingredients.
3. **Identify all things I need to know before feeding**
   - **Budget:** Consider the cost of food and any additional supplements or treats.
   - **What raw data:** Type of pet, dietary requirements, and feeding preferences (e.g., wet food in the morning, dry food in the evening).
   - **Inferences:** Based on your pet's activity level, age, and health, adjust the portion size or type of food as needed.
4. **Organize the data and decide what I need to collect**
   - **Data Cleaning:** Ensure the food is fresh and stored properly to maintain quality and safety.
   - **Outliers:** If your pet has allergies, health issues, or is on a specific diet, tailor the feeding process to their needs.
   - **Make data usable:** Use a measuring cup or scale to provide the exact portion size recommended for your pet.
   - **Data Relationships:** Understand the relationship between the pet's age, activity level, and dietary needs to feed them appropriately.
   - **Apparent vs. Inferred:** Don't assume all pets of the same species eat the same amount—base the portion size on your pet's specific requirements.

5. **Find and identify the relationships**
   ○ **Look for:** Connections between the type of food and how your pet responds (e.g., energy levels, digestion, coat health).
   ○ **Outliers:** Treats or snacks should be given in moderation to avoid overfeeding.
   ○ **Percentage:** Determine what percentage of the pet's diet is main meals versus supplements or treats.
   ○ **Chart:** Visualize the feeding schedule to ensure consistency in timing and portion size.
   ○ **Root cause:** Ensure the feeding process meets your pet's nutritional needs to avoid health issues.
6. **Find a solution**
   ○ **Undo the problem:** If your pet refuses to eat or shows signs of an upset stomach, reassess the food type or portion size and consult a veterinarian if necessary.
   ○ **Change the situation:** Adjust the feeding routine or food type to suit your pet's changing needs (e.g., age, activity level).
7. **Presentation/Tell a story**
   ○ **Opportunities:** By feeding your pet properly, you ensure their well-being, build trust, and strengthen your bond with them.