Name: Emir Dincer
Class: ECO 32500 - Python for Business Analytics
Date Due: 12/13/2024

HW 12: Take out trash

1. **Identify the problem, metric, be specific**
    - **Problem:** Your trash needs to be taken out to maintain cleanliness and prevent odors or pests (Objective: remove household waste efficiently and responsibly).
    - **Question:** What is the best way to take out the trash while minimizing mess and ensuring proper disposal?
    - **Why the question:** Regularly taking out the trash helps keep your living space clean, reduces environmental impact, and prevents unpleasant odors or pest issues.
2. **What do I need to know to answer the question?**
    - **Action point:** Understand the process of gathering, securing, and disposing of trash based on local waste disposal guidelines.
    - **What needs collecting:**
        - Size and type of trash bag (appropriate for the amount of waste).
        - Trash disposal location (e.g., curbside, building dumpster, recycling bins).
        - Disposal schedule (e.g., trash pickup day, recycling day).
    - **Beginning data:** Gather all household trash into a secured bag, ensuring no leaks or spills.
    - **Collect data for:** Confirming the trash bag is not overloaded and is suitable for disposal regulations.
3. **Identify all things I need to know before taking out the trash**
    - **Budget:** Consider costs of trash bags and any disposal fees if applicable.
    - **What raw data:** Types of waste (e.g., general trash, recyclables, compost) and proper disposal methods for each.
    - **Inferences:** Based on the volume of waste, decide if one trip is sufficient or if multiple trips are needed.
4. **Organize the data and decide what I need to collect**
    - **Data Cleaning:** Ensure trash is securely bagged and tied to prevent leaks or spillage.
    - **Outliers:** Sharp or hazardous items may require special handling or disposal methods.
    - **Make data usable:** Separate recyclables, compost, and general trash into appropriate bins or bags.
    - **Data Relationships:** Understand how separating waste types impacts local disposal processes and environmental benefits.
    - **Apparent vs. Inferred:** Don’t assume all items can go in general trash—check for recyclable or compostable materials.

5. **Find and identify the relationships**
    - **Look for:** Connections between trash type and disposal location (e.g., recycling bin for plastics, trash bin for non-recyclables).
    - **Outliers:** Unusual waste items like electronics or batteries may require special disposal centers.
    - **Percentage:** Estimate the proportion of trash that can be recycled or composted to reduce general waste.
    - **Chart:** Visualize the disposal steps from bagging the trash to dropping it off at the correct location.
    - **Root cause:** Ensure all trash is securely contained and properly sorted to avoid littering or environmental harm.
6. **Find a solution**
    - **Undo the problem:** If the trash spills or leaks, clean the area and re-secure the trash in a sturdier bag.
    - **Change the situation:** Use a trash can with a liner or multiple bins for easier sorting and disposal.
7. **Presentation/Tell a story**
    - **Opportunities:** Taking out the trash regularly ensures a clean, hygienic home environment and supports environmentally responsible waste disposal practices.