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**Topic 38 - How to Get Information Out of a List Within a Dictionary**

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**What**

If you have a list stored within a dictionary (like a list of discounts a customer qualifies for), you can access specific information from this list directly, allowing you to select a value based on certain conditions.

**Why**

This approach is useful for scenarios where you need to apply a specific value based on the list's contents but only want to retrieve the most relevant value rather than everything within the list.

**How**

In this example, you check the customer’s discount list to find and apply only the largest qualifying discount. You do this by:

1. **Starting with the largest discount** and checking if the customer qualifies.
2. **Using if and elif statements** to determine the largest discount they qualify for by examining the "discounts" list in their dictionary.

Example:

1. Define the customer dictionary with a list of discounts:

python

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customer\_29876 = {

"first name": "David",

"last name": "Elliott",

"address": "4803 Wellesley St.",

"discounts": ["standard", "volume", "loyalty"]

}

1. Use if and elif statements to find the biggest applicable discount:

python

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if "brother-in-law" in customer\_29876["discounts"]:

discount\_amount = 0.30

elif "loyalty" in customer\_29876["discounts"]:

discount\_amount = 0.15

elif "volume" in customer\_29876["discounts"]:

discount\_amount = 0.10

elif "standard" in customer\_29876["discounts"]:

discount\_amount = 0.05

1. **Explanation**:
   * Start with "brother-in-law" as it has the highest discount (30%).
   * Use elif statements to check for "loyalty" (15%), "volume" (10%), and "standard" (5%).
   * Stop at the first discount the customer qualifies for; this prevents applying multiple discounts.
2. **Check Result**:

python

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print(f"Discount applied: {discount\_amount \* 100}%")

# Output: Discount applied: 15%

**Summary**

Using in to check if certain items exist within a list stored in a dictionary allows you to quickly determine specific, applicable values. This is a simple way to retrieve prioritized information without needing to apply each item in the list.

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