



## Code:

python



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```
items = ["apple", "banana", "orange", "apple", "mango"] unique_item = set() for item in items: if item in unique_item: print("Duplicate: ", item) break unique_item.add(item)
```



## Step-by-Step Explanation:



### Step 1: Your List

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```
items = ["apple", "banana", "orange", "apple", "mango"]
```

- You have a list of items (fruits), and some of them repeat.
- "apple" appears twice.



### Step 2: Create an Empty Set

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```
unique_item = set()
```

- You make a set named `unique_item`.
- A **set** in Python stores **unique** values — it does **not** allow duplicates.
- We'll use this to **track which items we've already seen**.



### Step 3: Loop Through Each Item

python

```
for item in items:
```

- You go through each item in the list **one by one**:
  1. "apple"
  2. "banana"
  3. "orange"
  4. "apple" ← Duplicate
  5. "mango"

## Step 4: Check If It's Already Seen

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```
if item in unique_item: print("Duplicate: ", item) break
```

- For each `item`, you check:
  - **Has this item been seen before?** (i.e., is it in the set?)
  - If **yes** → print that it's a duplicate and stop the loop using `break`.

## Step 5: Add to Set If Not Seen

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```
unique_item.add(item)
```

- If the item **was not already in the set**, you add it to `unique_item` so that it will be tracked for the next time.

## Full Execution Flow:

Step	item	unique_item Set	Is it a duplicate?
1	"apple"	{}	No → add "apple"
2	"banana"	{"apple"}	No → add "banana"
3	"orange"	{"apple", "banana"}	No → add "orange"
4	"apple"	{"apple", "banana", "orange"}	Yes → Print and break
5	<i>loop stops here</i>	-	-

✔ Output:

makefile

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Duplicate: apple

⚡ Summary:

- You're checking for the **first duplicate item**.
- You use a `set` to **track seen items**.
- The loop **stops immediately** when a duplicate is found.