

Experiment 04 - Exercise 07: Fruit Sets (Intersection, Difference, Union)

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Objective

Create two sets of fruits and find:

- fruits in both sets,
- fruits only in the first set,
- count of all unique fruits from both sets.

Input

Number of fruits n and fruit names for sets **s1** and **s2**.

Output

Intersection, difference, union, and the union size.

Approach

Use set operations:

- Intersection: **s1** & **s2**
- Difference: **s1** - **s2**
- Union: **s1** | **s2**
- Count of all unique fruits: `len(s1 | s2)`

Time Complexity

$O(n)$ average-case for building sets and computing operations.