Task 1_1: Longest Continuous Increasing Subsequence

Revised Solution and Changes

1. Added explicit **type hints** to enhance code readability and ensure clarity about the function's input and output types.
2. Simplified edge case handling for an empty list.

Changes

- Added type hints: `nums: list[int] -> int`.
- Replaced `if not nums:` with `if len(nums) == 0:` for explicitness.

Task 1_2: Merge Two Sorted Arrays

Revised Solution and Changes

1. Added **type hints** for inputs and return type.
2. Included **extra comments** to improve readability.
3. Checked if either array is empty, optimizing early return scenarios.

Changes

- Added type hints: `nums1: list[int], nums2: list[int] -> None`.
- Optimized for cases where `nums2` is empty (`if n == 0:`).

Task 1_3: Intersection of Two Arrays

Revised Solution and Changes

1. Added **type hints** for inputs and outputs.
2. Enhanced readability by splitting operations into intermediate variables.

Changes

- Added type hints: `nums1: list[int], nums2: list[int] -> list[int]`.
- Split `set(nums1).intersection(nums2)` into intermediate steps (`set1`, `set2`, `result`) for clarity.