Classroom Assignment: Array Intersection Calculation

Learning Objective:
Understand and apply basic programming constructs in TypeScript to compute the intersection of two arrays.

Expected Completion Time:
Best Case: 10 min

Average Case: 15 min

Assignment Details:
Create a JavaScript program that defines a function to compute the intersection of two arrays. The intersection should include elements that appear in both arrays without any duplicates.

Assignment Requirements:
1. Write a function named `intersection` that accepts two arguments, `arr1` and `arr2`, which are arrays of numbers, and returns an array of their intersection.

2. Ensure no duplicate elements in the resulting array. If an element appears in both `arr1` and `arr2`, it should appear only once in the result.

3. Use a loop to find common elements. Iterate through each element of `arr1` and check if it is present in `arr2` and not already included in the result array.

4. Include example calls to the `intersection` function with different arrays to demonstrate the function's functionality. Include examples with no common elements, all elements common, and typical cases.

Expected Outcome:
Upon completion, you should be able to:

- Understand the concept of arrays and loops in JavaScript.

- Demonstrate the calculation of intersection for various array inputs, handling both typical and edge cases.