

## OOP – Week 2 Assignment (C++ Vectors)

1. Implement a dynamic array using std::vector and demonstrate push\_back, pop\_back, insert, erase, size, and capacity.
2. Write a program that removes duplicates from a vector of integers.
3. Given a vector of integers, rotate it by k positions to the right.
4. Implement a function that merges two sorted vectors into a single sorted vector.
5. Create a menu-driven program using vectors to manage student records (add, update, delete, search).

LeetCode Practice (Mandatory):

- 217. Contains Duplicate
- 26. Remove Duplicates from Sorted Array
- 189. Rotate Array

Deadline: Before starting OOP Week 3