

## **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