Classes-2 Homework-5

Do the following question and submit it on google classroom.

(Only CPP files)

(example) **Q1_22_1234.cpp**

1. Create a class to represent student records with private attributes for name, roll number, and marks. Implement a constructor to initialize these attributes, a destructor if necessary, and a public method to display multiple student records.
2. Define a class for employee details, including private attributes for name, employee ID, and salary. Create an array of employee objects and implement methods (including constructors and a destructor, if needed) to add, delete, and display employee records.
3. Construct a class to represent a book with private attributes like title, author, ISBN, and price. Develop methods, including constructors and a destructor, for managing a book inventory, which includes adding, updating, and listing books.
4. Design a class for a bank account with private attributes such as account number, account holder's name, and balance. Implement methods (including constructors and a destructor) for deposit, withdrawal, and displaying account details.
5. Define a class to represent a date (day, month, year) with private data members. Write methods, including constructors and a destructor if necessary, to validate dates, find the day of the week for a given date, and compare two dates.
6. Create a class to represent a rectangle with private attributes for length and width. Write methods, including constructors and a destructor, to calculate the area, perimeter, and check if two rectangles intersect.
7. Design a class to hold contact information (name, phone number, email) with private data members. Build methods, including constructors and a destructor, for managing a contact list, allowing users to add, search, and delete contacts.
8. Define a class to represent a car with private attributes like make, model, year, and price. Implement methods (including constructors and a destructor) to add, search, and display car records in an inventory.
9. Create a class to represent a book in a library catalog with private attributes for title, author, publication year, and availability status. Develop methods, including constructors and a destructor, to manage the library catalog.
10. Construct a class for movie details, including private attributes such as title, director, release year, and rating. Implement methods (including constructors and a destructor) to add, search, and display movie information in a database.