**Classwork 1 (Report)**

**Introduction:**

This c++ program is designed to simulate basic operation of a library management system. The system allows for member registration , issuing and returning books and calculating fines for overdue books. The program has many classes including Book, Person, Member, and Librarian.

**Overview of the system:**

**classes and their roles:  
 person: a base class providing common attributes like name, address and email.**

**Member: Derived from Person represents a library member. It includes member specific function and a list of borrowed books.**

**Librarian: Also derived from Person and handles administrative tasks like adding members and issuing books.**

**Books: Represents a books in the library.**

**Key functionalities:**

1. **Adding members: Users can add new members to the library.**
2. **Issuing books: Books can be issued to members with due dates calculated automatically.**
3. **Returning books: Members can return the books they borrowed.**
4. **Displaying borrowed books: Members can view the books they hold in possession.**
5. **Calculating fines: the system calculates fines based on the number of days a book is overdue.**