Q1. (Hockey League)

Draw a UML Class Diagram representing the following elements from the problem domain for a hockey league. A hockey league is made up of at least four hockey teams. Each hockey team is composed of six to twelve players. A team has a name and a record. Players have a number and a position. Hockey teams play games against each other. Each game has a score and a location. Teams are sometimes led by a coach. A coach has a level of accreditation and a number of years of experience and can coach multiple teams. Coaches and players have names and addresses. Draw a class diagram for this information and be sure to label all associations with appropriate multiplicities.

Q2. (Movie Shop)

Design a system for a movie shop, in order to handle ordering of movies and browsing of the catalogue of the store, and user subscriptions with rechargeable cards.

- Only subscribers are allowed hiring movies with their own card.
- Credit is updated on the card during rent operations.
- Both users and subscribers can buy a movie and their data are saved in the related order.
- When a movie is not available it is ordered

Q3. Compare the code implementation in prog1.java and prog2.java. Which one is better in terms of design consideration and why? Explain your answer using proper terms for the design considerations.

Q4. Read the code in the file pro3.java. In this example, the purpose of *MyReader* class is to read the resource. What is wrong or bad with this implementation? Explain your answer and rewrite the program in a better way.