**Submission deadline is Monday October 23rd by 11:59pm**

**Q1: Draw Class Diagram for Cinema Booking System from the scenarios below (show all attributers and operations)**

**Purchase Tickets**

The customer selects a date and is provided with a list of showings for that date, including the time of the showings. The customer selects a showing and is provided with details of the showing, including film title, age rating, duration, and a short trailer description. The customer then selects the quantity of tickets required, together with the ticket type. Ticket types may be one of student, child, or adult. The total cost of the booking is supplied to the customer. If the customer is happy, they then confirm their booking request.

If there are insufficient seats available at the showing, the booking request is cancelled and the customer is invited to make a further booking request. If there are sufficient seats, the customer confirms the booking and enters their payment card details, which include card number and expiry date. Payment cards may be one of two types - credit card or payment card. The payment is transacted.

**Collect Tickets**

On entry to the cinema, the customer swipes their payment card through an attractive and easy to use swipe / printer device which determines the current booking details for the payment card. If a booking currently exists for the payment card, the swipe / printer device prints the appropriate tickets for the booking.

**Question 2: Draw the class diagram for the following system ( without attributes and operations needed)**

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 wither chargeable 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.