# Oracle Practice 1,2,3,4

1.2

Student Registration System (ABC School District)

Key data to capture and store:

* Student Information:
  + Student ID (Primary identifier)
    - First name, middle name, last name
    - Date of birth
    - Gender
    - Contact information
      * phone number
      * email
    - Home address
    - Emergency contact details (name, relationship, contact number)
* Academic Information:
  + - Grade level
    - Class enrolled
    - Attendance records
* Login and Access:
  + Student login credentials
    - username
    - password
* Payment Information:
  + Tuition payment status
  + Payment method (if applicable)
  + Scholarship or financial aid information

Library Management System (XYZ Community Library)

Books Management:

* Book ID (unique identifier)
  + Title
  + Author(s)
  + ISBN number
  + Category
  + Year of publication
  + Number of copies available
  + Location in library
  + Condition
  + Status
    - Available
    - Rent out
* Customer/Patron Information:
  + Customer ID (unique identifier)
  + First name, last name
  + Contact information
    - phone number
    - email
  + Address
  + Borrowing history
    - books borrowed
    - returned
    - due dates
* Transactions:
  + - Loan ID (unique identifier for each transaction)
    - Book borrowed
    - Borrower’s ID
    - Date borrowed
    - Due date
    - Date returned

1.3

1)Hierarchical Model

2)Network Model

3)Object oriented model

4)Relationship Model

5) Relationship Model

1.4

LibBook Business

* Rules
  + Membership
    - Corporate (Membership fee)
    - Student (Free)
    - Individual (Membership fee)
    - New membership introduced in future
* Constraints:
  + Membership other than student must pay a fee

Star Care Hospital Business Rules and Constraints:

* Business Rules:
  + Doctor Registration: Each doctor is assigned a unique ID that begins with "DC".
  + Patient Registration: Each patient is assigned a unique patient ID that begins with "PT" when they register for the first time.
* Constraints:
  + Doctor Experience: Doctors must have at least seven years of experience to be associated with the hospital.