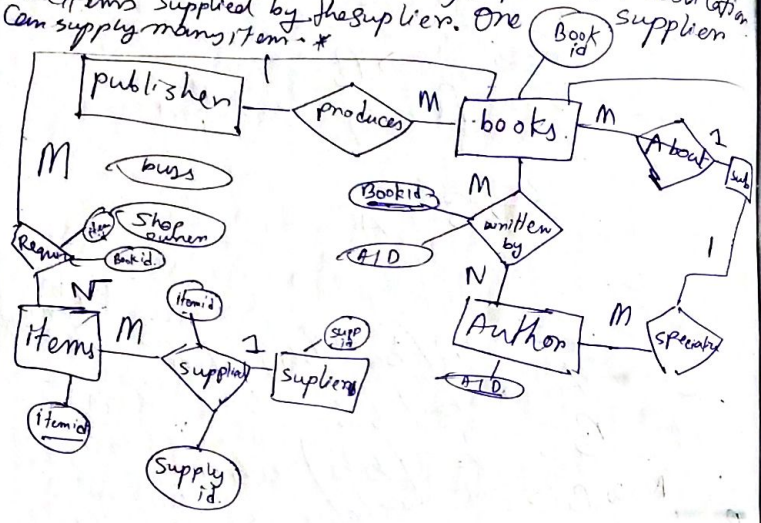
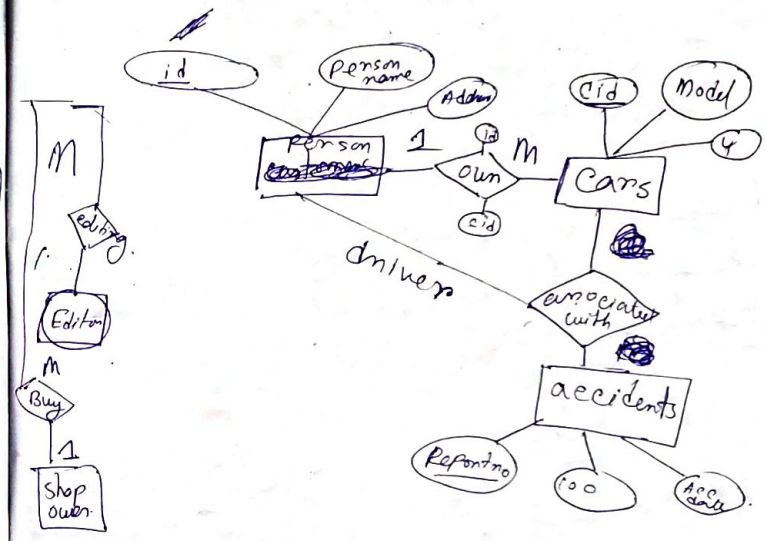
A publishing company produces books on various subjects. The books are written by authors who specialize in one particular sub. The company employs editors who, not necessarily being specialists in particular area, each take sole responsibility for editing one or more book publishing. Every book requires some items for publish. Publication these items supplied by the suplier. One supplier can supply many item. *

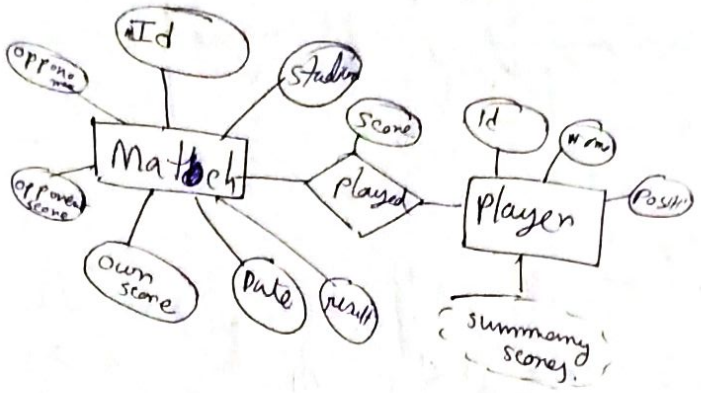


// Construct an ER diagram for a car-insurance company whose customers own one or more cars each. Each car is associated with zero to any number of recorded accidents.

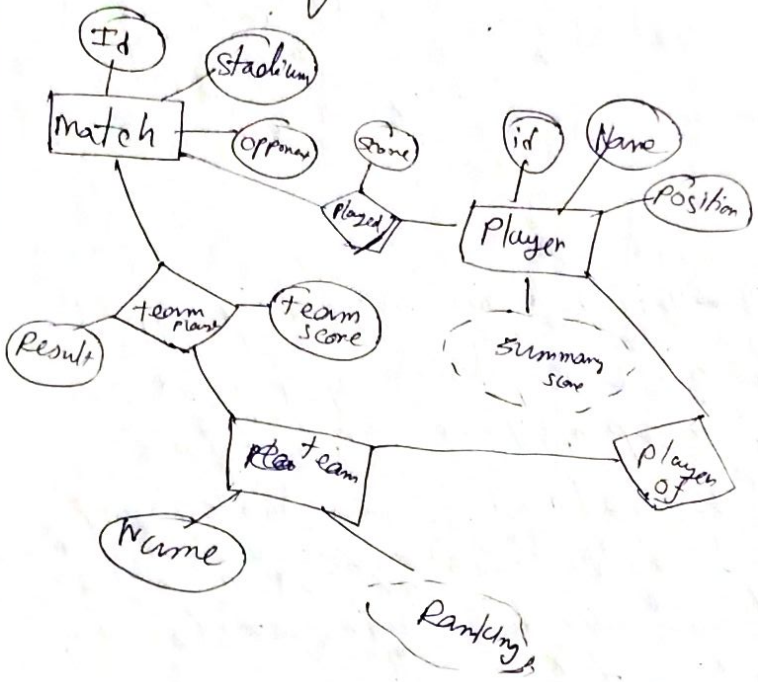
* Shop owner buys books from the publisher. Shop owner can buy many books but one book can bought by one shop owner only. Books are uniquely identified by Book id.



// Design an E-R diagram for keeping track of the Exploits of your favourite sports team. You should store the matches played, the scores in each match, the players in each match and individual player statistics for each match. Summary statistics should be modeled as derived attributes.



Extend the question to track the same information for all teams in a league.



Question-4

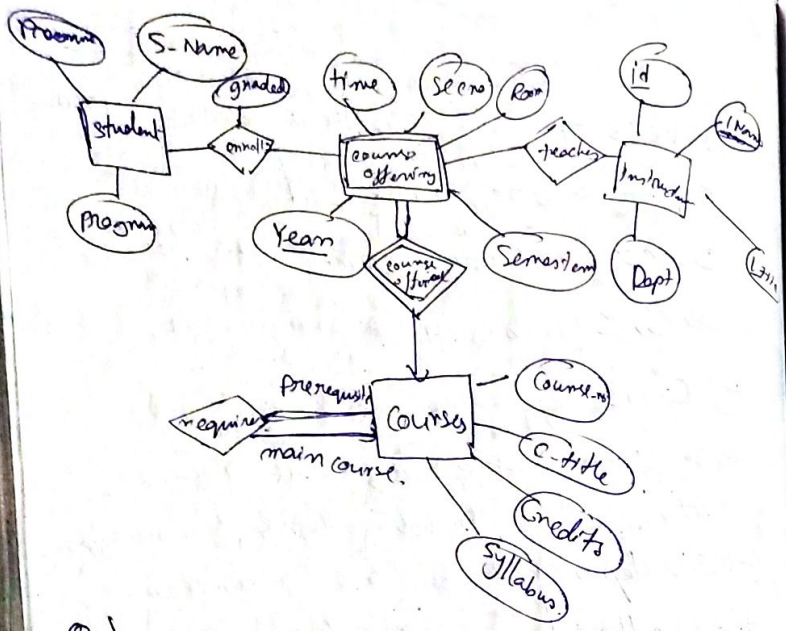
A university register's office maintains data about the following entries

(a) courses, including number, title, credits, syllabus and prerequisites,

b) Course offerings, including course number, year, semester, section number,

d) instructors, including identification number, name, department, and title. Further the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled.

Construct a E-R diagram for the registrar's office, Document all assumptions that you make about mapping constraints.



Q1)

In an entity relationship (ER) model.

Suppose R is a many to one relationship from entity set E_1 to entity set E_2.

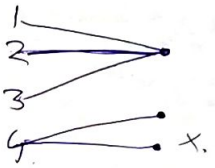
Assume that E_1 and E_2 participate totally in R and that the cardinality of E_1 is greater than the cardinality of E_2. Which one of the following is true about R?

Ans:-

A) Every entity in E_1 is associated with exactly ~~one~~ one entity in E_2.

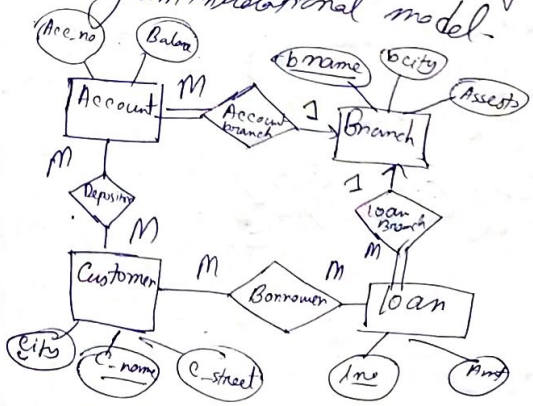
E_1

1
2
3
4.



Question 1:-

Find the minimum number of tables required for the following ER diagram in relational model.



(1) First identify the cardinality.

(2) Many to Many relation
→ individual table we have to build.

(3) Many to one,
the entity which is in many side will be merged with relationship.

Ans

(1) Account (Ac-no, Balance, b-name)

(2) Branch (b-name, b-city, Assets)

(3) Loan (L-no, Amt, b-name)

(4) Borrower (C-name, L-no)

(5) Customer (C-name, C-street, C-city)

(6) Depositor (C-name, Ac-no)

Question 2:-

Find the minimum no of tables required for the following ER diagram