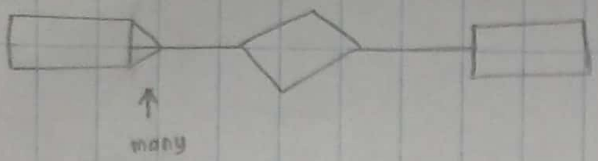
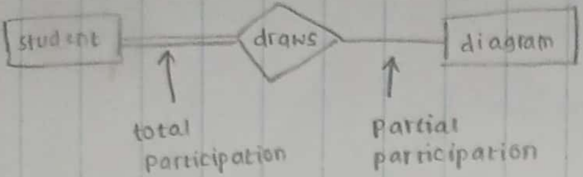
Entity - Relationship Diagram - DBMS - Workshop

28/07/2023

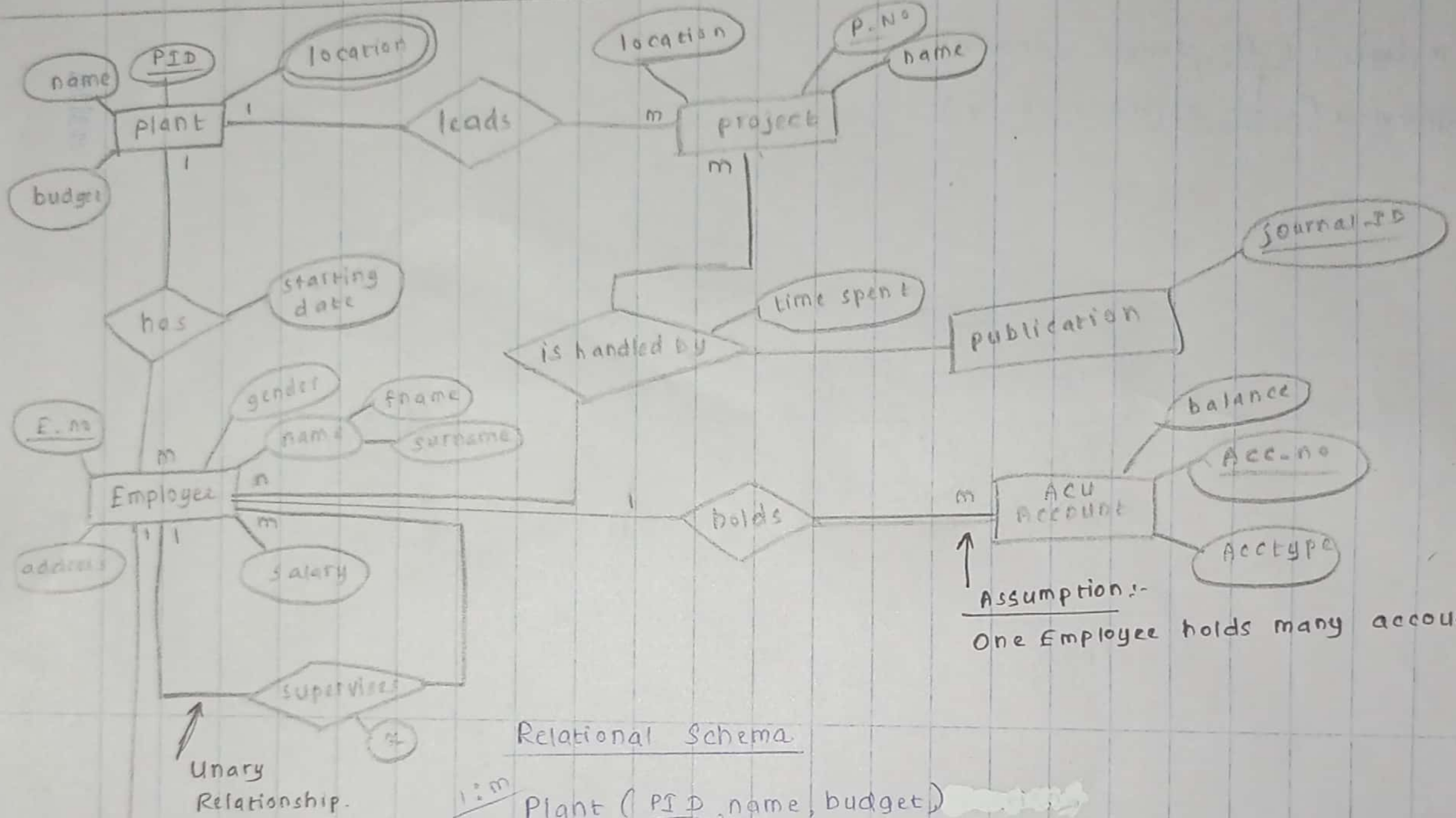


chen's
1 : 1
1 : m
m : n

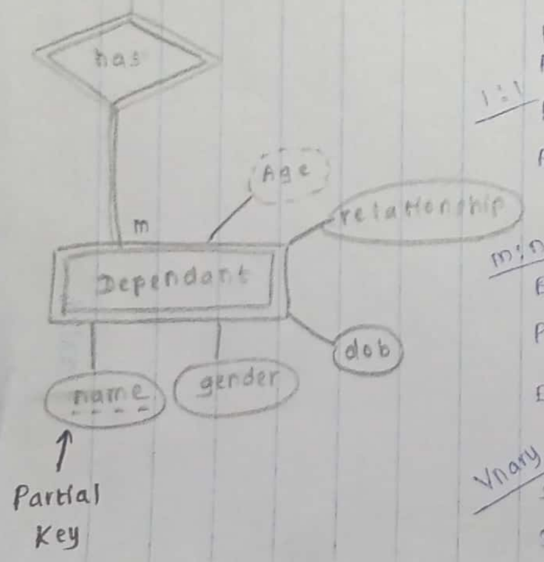
In a weak entity, there can't be an primary key. Instead of primary key, it is called as "partial key".


student
draws
diagram
total participation
Partial participation

Vnary 1:1 / 1:M
Unary M:N


name
PID
location
plant
1
leads
m
location
P.No
name
project
m
1
has
starting date
is handled by
time spent
journal-ID
publication
E.no
gender
fname
name
surname
m
n
Employee
1
holds
m
ACU Account
balance
Acc-no
Acctype
address
1
1
m
salary
supervises
%
Unary Relationship.

Assumption :-
One Employee holds many accounts.


has
Age
relationship
m
Dependant
dob
name
gender
Partial Key

Relational Schema

1:m
Plant (PID , name, budget)
Project (P_NO, name, location, PID)
Plant-location (PID, location) ⟵ multivalued attribute

1:1
Employee (E_NO , salary, gender, address, fname, surname)
Account (Acc_no , Acctype, balance, E_No)

m:n
Employee (E_No, salary, gender, address, fname, surname)
Project (P_NO , name, location)
Employee - Project (E_No, PNo, time spent) ⟵ many to many relationships

Vnary
Student (a , b)
Diagram (c , d , a)

Upon completing each project, employees themselves may publish it. Each publication is uniquely tracked by its journal ID.

Employee (E_NO, Name)

Project (project_no, name, location)

Publication (Journal_ID)

handed by (ENO, Project_NO, Journal_ID, time spent)

Employee (E-No, fname, surname)

Supervisor (E_NO, Superviser-ID, x)