Filter 10-3-2022
Naveen Sir

ER Model

class-16

sintest [peter chain] (E-R Model develop) [8]

E - Entity
R - relationship

Peter chen 1976

Data base disine के लिए use करते है
ER-model है

→ यह एक Pictorial representation करता है → मतलब picture के रूप में दिखना

E-R-Model

E-R-Diagram

E - Entity set
R - Relationship set

Entity set क्या होते है

:- पूरी table entity set है

student		
SID	SN	FN
1	A	X
2	B	Y
3	C	Z

Entity
tuple
Entity
Entity

collection of Entity/toupls = Entity set

Entity set का नाम students

Entity set → unique Name
Entity set का नाम unique होना चाहिए
→ Attribut

strong Entity set — Week Entity set

Strong Entity set :-
↳ वह होती है जिसमें primary key होती है
↳ They exist primary key -

Rectangle
↳ represent strong Entity set by Rectangle

Week Entity set :-
↳ they no any primary key -
वह कोई primary key नहीं होती है।

→ default Rectangle

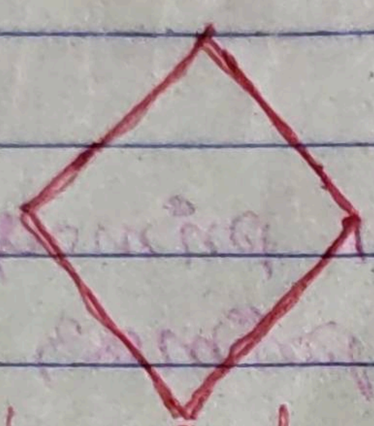
→ by default Entity set हमेशा strong Entity set के मतलब इसमें primary key होती है।

Relationship set

Name	Ad	BN	BM	SN
A	X	1	1	A
B	Y	2	2	B

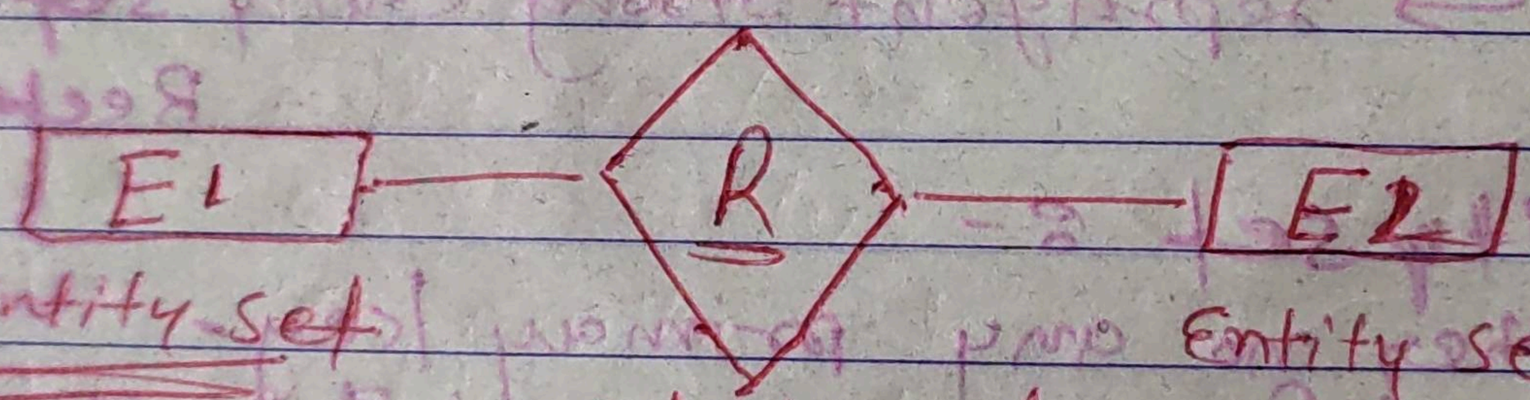
A Number is Relation

Relation + Relation + ... = Relationship set



→ diamond

① Relation set को किसे represent करते हैं
= diamond से



Entity set — Entity set

Relationship set — 2 binary है

↳ नाम unique होना चाहिए

↳ Degree — Number of Entitys कितनी connected है

↳ अपर वाला binary relationship है

↳ mapping — E1 — E2 entity/tuple relation

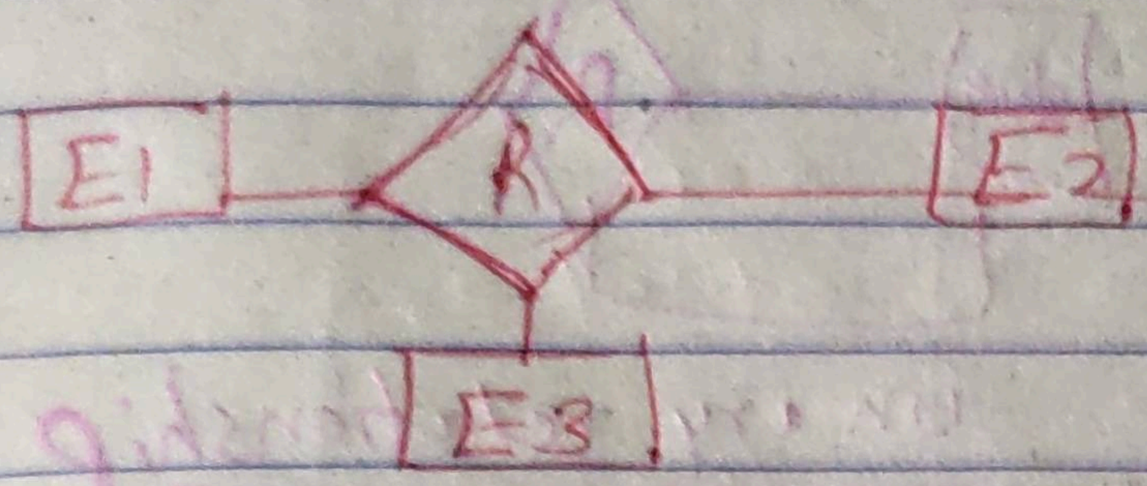
↳ ① one to one
② one to May
③ many to one
④ many to many

Binary relationship best relationship

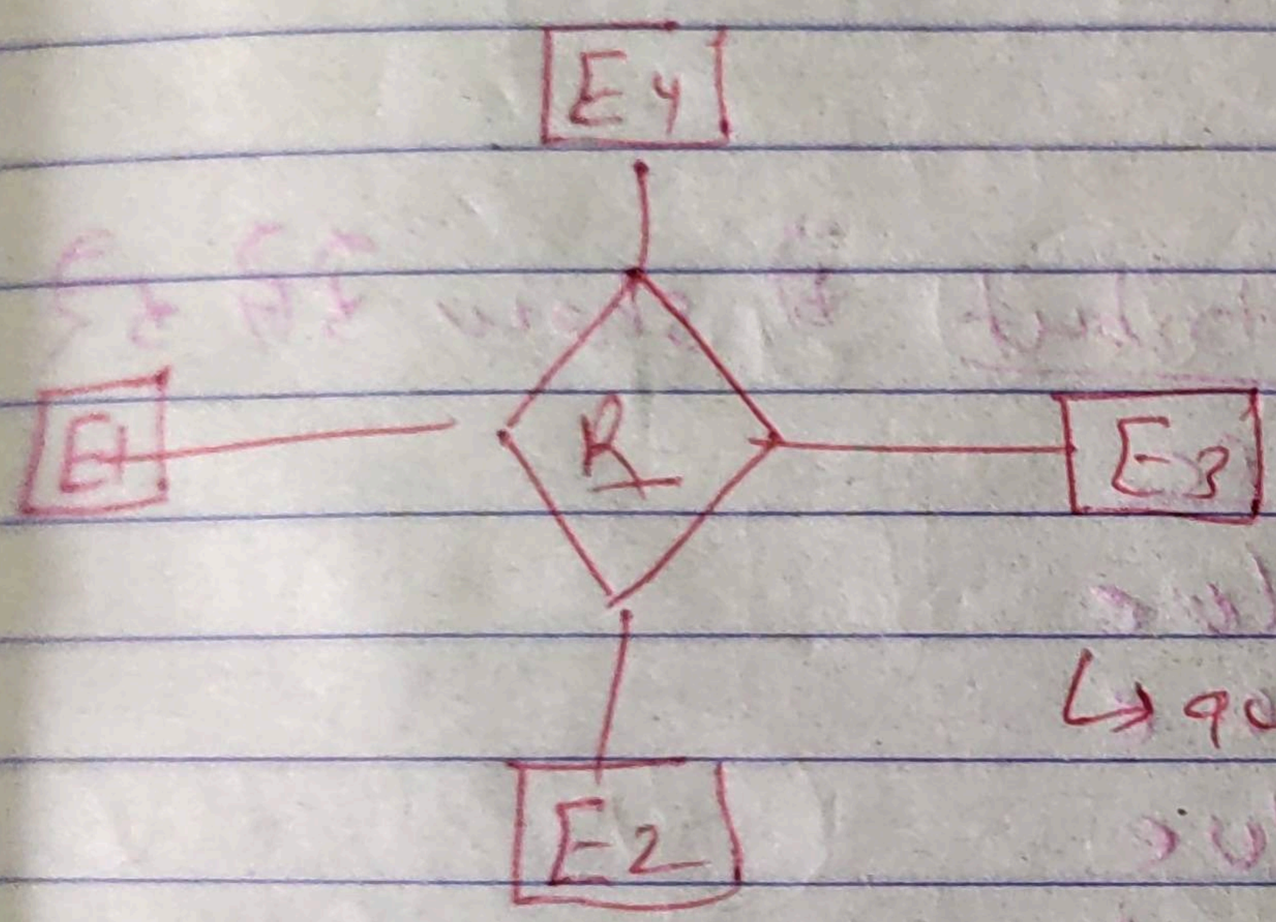
E-R-Diagram — Live class. 17 Neeraj Sir

Relationship set —

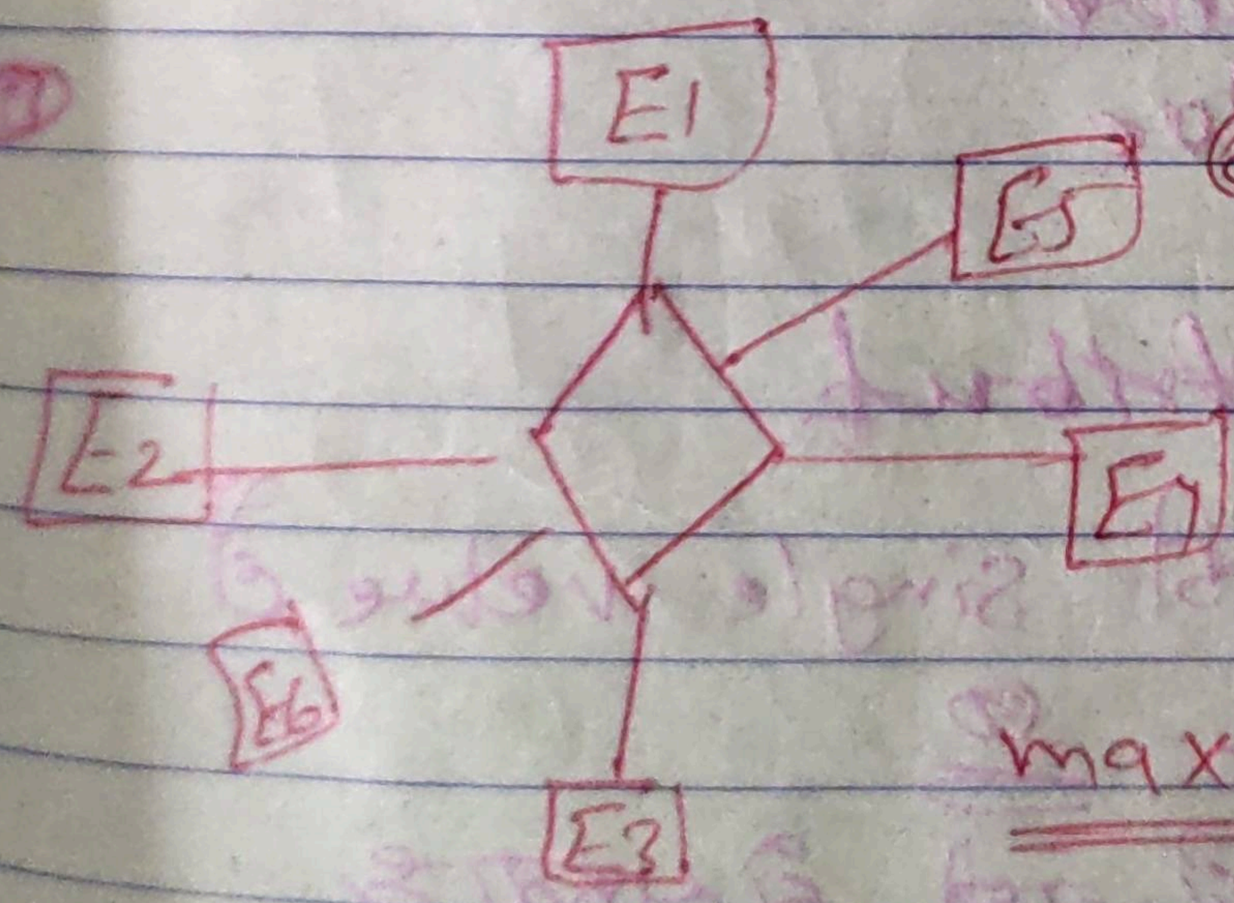
Degree → How many entity conected with relasnship set

① 

↳ Ternery degree
↳ Ternery relationship set

② 

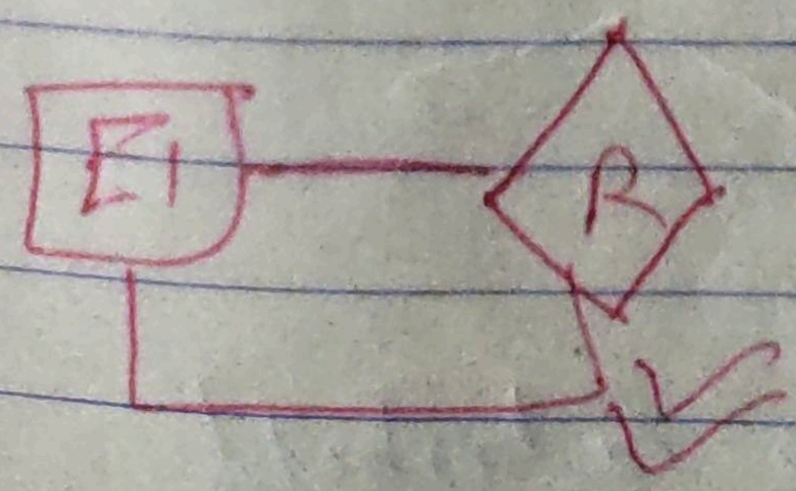
↳ Degree — 4
↳ quaternery degree
↳ quaternery relationship set

③ 

more then for e entity set
↳ 6 Array
↳ 7 Array Relationship set

maximum — N Array

what about minimum — Unary — ①



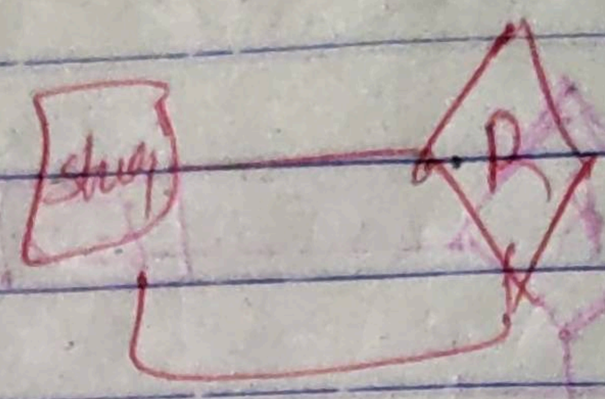
यह खुद से भी relation बना सकता है

Called as Unary

Unary relationship set Example

Student

Sid	SN	Class R
1	A	A
2	B	A
3	C	A
4	D	R
5	E	D
6	F	D



unary relationship

Entity set के Attribut को show कैसे करे

Attribut 5 Type

① ↳ single value
② ↳ multi value
③ ↳ simple value
④ ↳ Composite value
⑤ ↳ derived value

① Single value attribut

↳ जो attribut की single value हो

Example Roll No - 50

Roll No दो नहीं हो सकता है
और Aadhar Number एक ही होगा

SID ellips

↳ Simple value attribut

↳ और Roll No हमेशा value एक ही होगी

② multivalued attribut

mobile – mobile Number 2 भी हो सकता है
↳ more then 1 value
↳ Email Id 1 से भी ज्यादा हो सकती
मतलब Email Atribut Multivalue Atribut होता है

(mobile No) Double ellips

③ Simple Attribute

↳ एक ऐसा Attribut जिसे आगे devide नहीं कर सकते
↳ Attribut which is not devided further

ellips

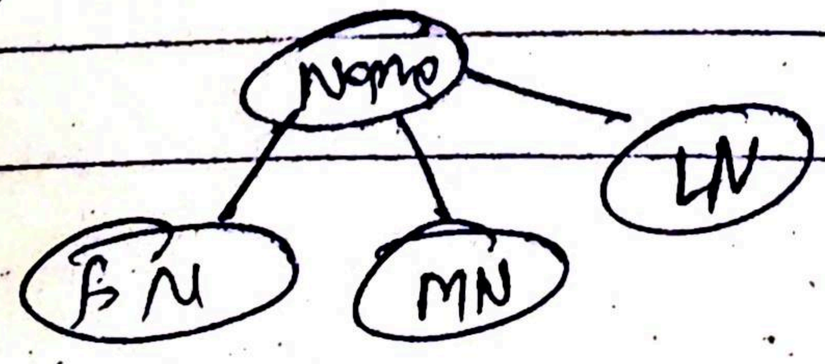
ex SID इसको devid नहीं कर सकते हैं
⇒ simple value Attribut को single value attribut भी कहे सकते हैं

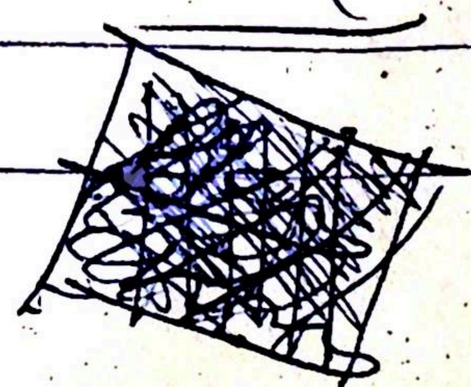
④ Composite Attribute :-

↳ एक ऐसा Attribute जिसको आगे devid कर सकते है
↳ Attribute which is further devided –

Ex **Name** < Fist name, middel Name, Last Name

Tree structure
Parent-child Rely





(5) Derived Attribut :-

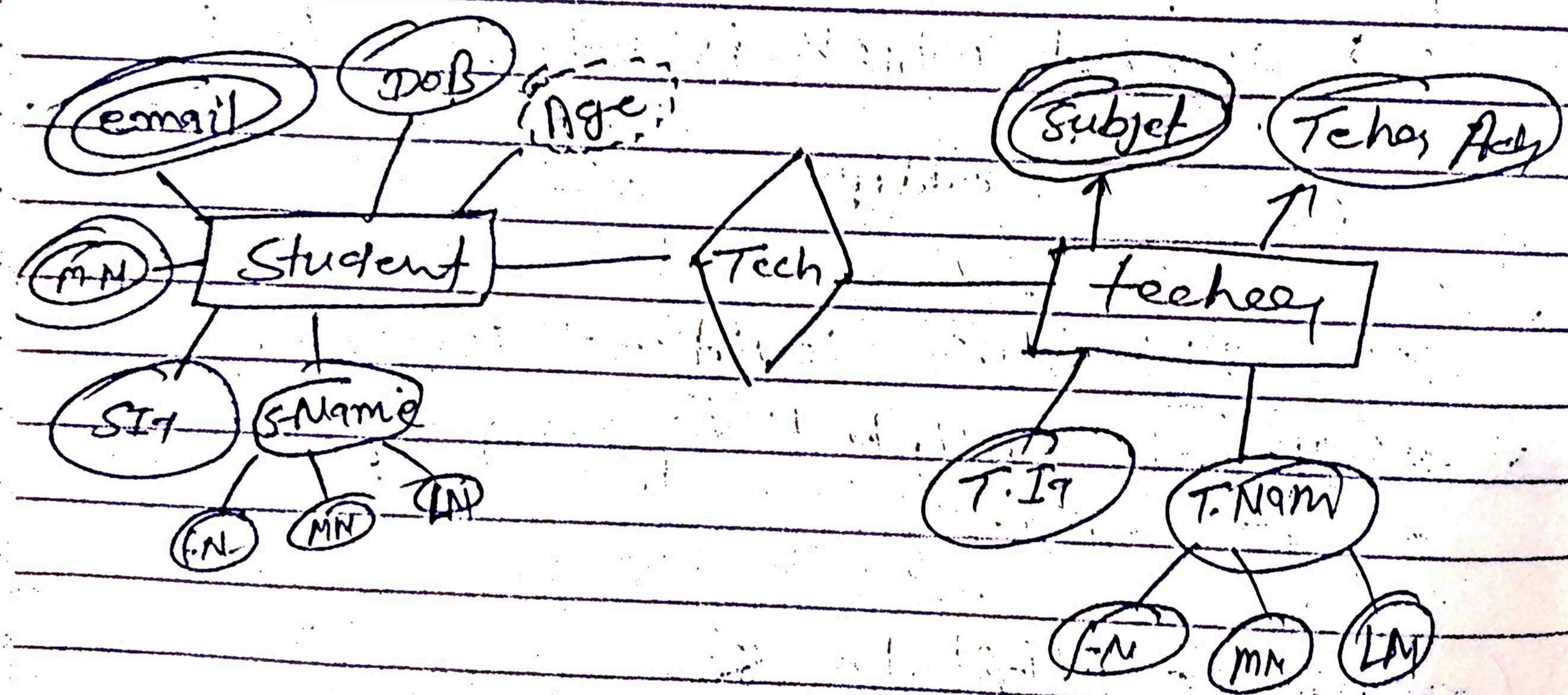
↳ ऐसा Attribut जिसकी value पहले से store होती है।

↳ value depends on already stored attributes

Ex - Age

(22) = | DoB |
|---|
| 20/10/1982 |

auto generat.

System अपने आप जनरेट करेगा

(Age) Dashed ellips