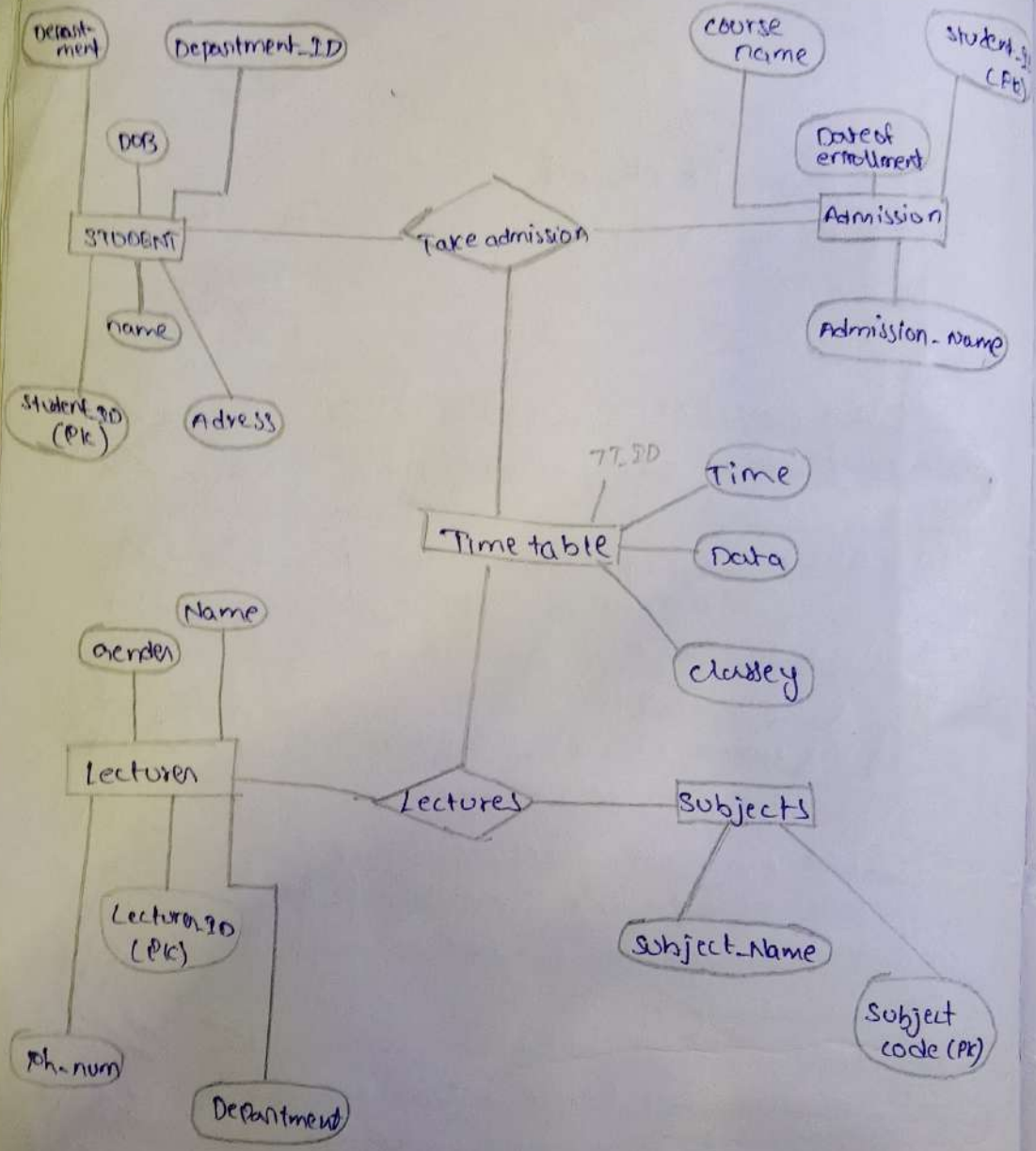

Depart-ment
Department_ID
DOB
STUDENT
name
Student_ID (PK)
Adress
Take admission
course name
Date of enrollment
Admission
Admission_name
TT_ID
Time
Time table
Data
classey
Name
gender
Lectures
Lectures
Subjects
Lecture_ID (PK)
Ph_num
Department
Subject_Name
Subject code (PK)

28/9/25

TASK (1)

conceptual design using ER Modal

Aim:- To design conceptual design using ER Modal for college Managment system

Tool required:-

https://draw.io (or creatly (ERD Plus)

steps involved in creating ER diagram

step1:- understanding

* Analyze the real world application:- college Managment system
* understand domain: Student, addmission, leture subjects.

step2:- Identify major entities

Entities are core components representing objects (or) concept

-> students
-> Admission
-> time table.
-> lecture
-> subjects.

step3:- Identity, Attributes. for entity

entity Attributes

student:- Name, student ID, Address, DOB, Dept

Addmission:- Admission. num, course name, data.

Time table: Time, data, clash.

Lecture:- Name, lecture ID, gender, department

Subjects:- Subjects name, subject code.

Step 4:- Relationship between entities

* Students take one or more admission.
* Admission student gets time table.
* Time table gives one or more subjects
* Lectures teaches on or more subjects.

Step 5:- Draw ER diagram using draw io.

* open https://draw.io
* choose blank diagram → click create.
* from left panel, draws the following.
* use ellipes for attributes.
* Solid lines for relationship connections.

Input for ER design:-

Real-time college mangment system scenario use requirements Data base design.

(Entity - Attribute - Relationship)

Output:-

Entity Relationship diagram (ER D) that shows

* All identified entitied with attributes
* All relationship with appropriate cardinalities.

VEL TECH	
EX No.	11
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	2
RECORD (5)	-
TOTAL (20)	12
SIGN WITH DATE	28/2/25

Result:- conceptual design using E R model for college department system using drawio has been implemented sucessfully.

28/9/25

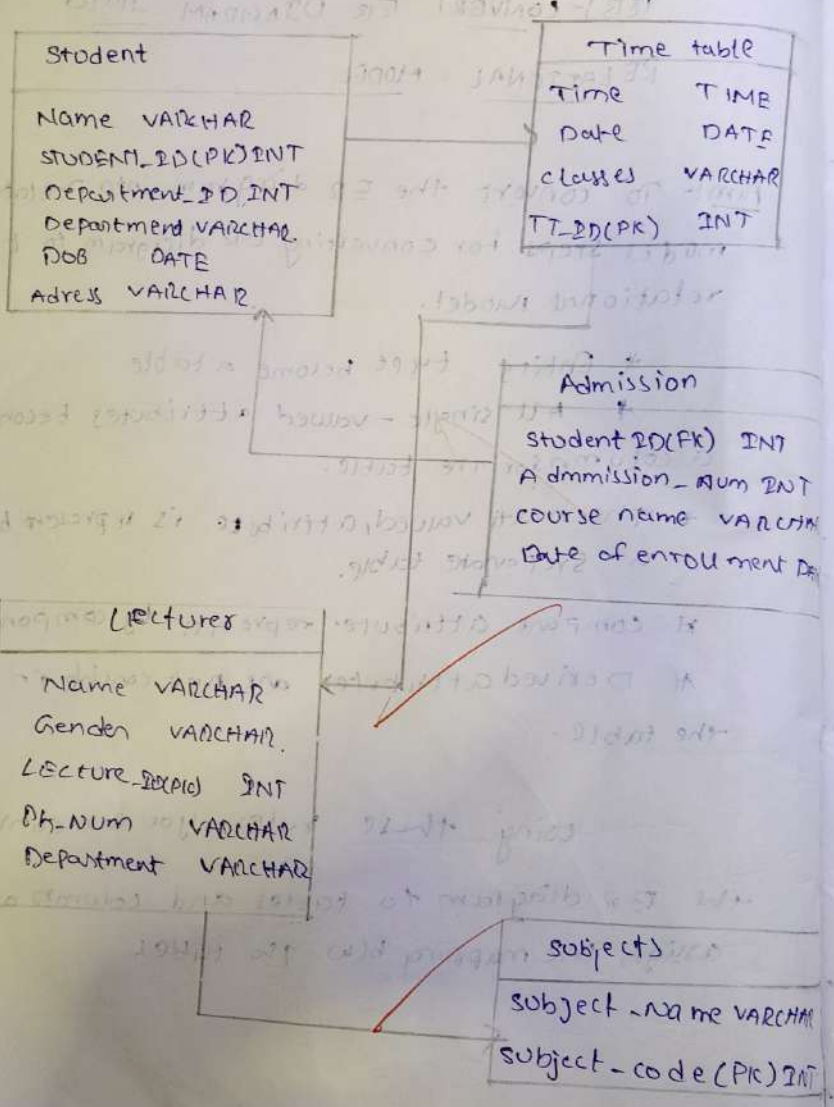
11(B)- CONVERT ER DIAGRAM INTO RELATIONAL MODEL

Aim:- To convert the ER diagram into relational model steps for converting ER diagram to the relational model.

* Entity type become a table.
* All single-valued attributes become a column for the table.
* The multi valued attribute is represent by a sreparate table.
* Compone attributes represents by component.
* Derived attributes are not conside in the table.

Using these rules, you can convert the ER diagram to tables and column and assign the mapping b/w the tables

Relational model :



VEL TECH	
EX No.	
PERFORMANCE (5)	1+2
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	2
TOTAL (20)	12
SIGN	

Results:- The relational model for the given ER. diagram was sucessfully converted.