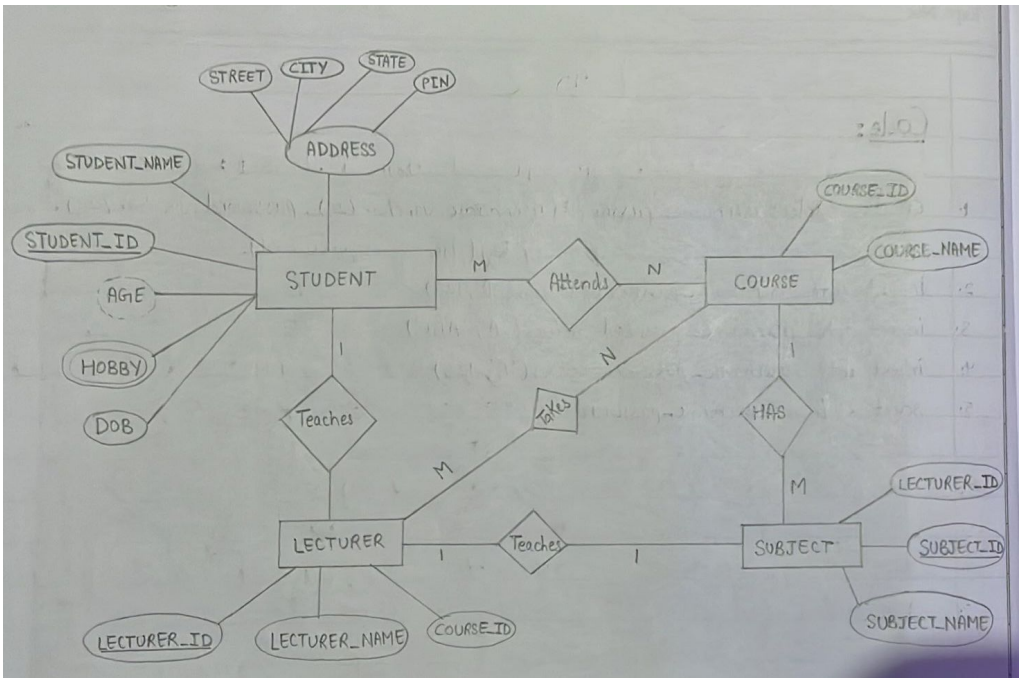
ER diagram



STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB
1	abc	abc	haryana	sonipat	131001	01-JAN-23
2	abc	abc	haryana	gurugram	110038	01-JAN-23
3	abc	abc	haryana	gurugram	131001	01-JAN-23
4	abc	abc	haryana	rohtak	11111	01-FEB-23
5	abc	abc	haryana	karnal	110033	01-MAR-23

ST_ID	HOBBY
1	cricket
1	football
2	cricket
4	basketball
5	badminton

COURSE_ID	COURSE_NAME
100	BTECH
103	MTECH
104	BDES
102	MSC
101	BSC

LECTURER_ID	LECTURER_NAME	COURSE_ID
10	ABC	100
30	ABC	100
40	ABC	102
50	ABC	103
20	DEF	101

SUBJECT_ID	SUBJECT_NAME	LECTURER_ID
204	DE	50
200	DBMS	20
201	ADA	10
202	COA	30
203	OS	20

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB
1	RAHUL	abc	haryana	sonipat	131001	01-JAN-23
2	RAHUL	abc	haryana	gurugram	110038	01-JAN-23
3	RAHUL	abc	haryana	gurugram	131001	01-JAN-23
4	abc	abc	haryana	rohtak	11111	01-FEB-23
5	abc	abc	haryana	karnal	110033	01-MAR-23

LECTURER_ID	LECTURER_NAME	COURSE_ID
50	Geetanjali Maam	103
10	DEF	101
40	Geetanjali Maam	102
20	Geetanjali Maam	101
30	Geetanjali Maam	100

STUDENT_ID	HOBBY
1	cricket
1	football
2	cricket
4	basketball
5	skating

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB
1	RAHUL	abc	haryana	sonipat	131001	01-JAN-23
2	RAHUL	abc	haryana	gurugram	110038	01-JAN-23
3	RAHUL	abc	haryana	gurugram	131001	01-JAN-23
4	abc	abc	haryana	rohtak	11111	01-FEB-23
5	abc	abc	haryana	karnal	110033	01-MAR-23
6	abc	abc	haryana	delhi	110081	01-JAN-23

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB
6	abc	abc	haryana	delhi	110081	01-JAN-23

STUDENT_ID	HOBBY
1	cricket
2	cricket
4	basketball
5	skating

SUBJECT_ID	SUBJECT_NAME	LECTURER_ID
202	COA	30
203	OS	20
200	DBMS	20
204	DE	50

STUDENT_ID	HOBBY
1	cricket
2	cricket
4	basketball
5	skating
6	volleyball

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB
6	ROHAN	abc	haryana	delhi	110081	01-JAN-23

COURSE_ID	COURSE_NAME
100	DSA
101	DSA
102	DSA
103	DSA
104	BDES

SUBJECT_ID	SUBJECT_NAME	LECTURER_ID
202	OOPS	30
203	OOPS	20
200	OOPS	20
204	OOPS	50

NATURAL JOIN

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB	HOBBY
6	ROHAN	abc	haryana	delhi	110081	01-JAN-23	volleyball

INNER JOIN

STUDENT_ID	STUDENT_NAME	STREET	STATE	CITY	PIN	DOB	STUDENT_ID	HOBBY
6	ROHAN	abc	haryana	delhi	110081	01-JAN-23	6	volleyball

FULL OUTER JOIN

LECTURER_ID	LECTURER_NAME	COURSE_ID	COURSE_ID	COURSE_NAME
30	Geetanjali Maam	100	100	DSA
10	DEF	101	101	DSA
20	Geetanjali Maam	101	101	DSA
40	Geetanjali Maam	102	102	DSA
50	Geetanjali Maam	103	103	DSA
-	-	-	104	BDES

LEFT OUTER JOIN

LECTURER_ID	LECTURER_NAME	COURSE_ID	COURSE_ID	COURSE_NAME
30	Geetanjali Maam	100	100	DSA
10	DEF	101	101	DSA
20	Geetanjali Maam	101	101	DSA
40	Geetanjali Maam	102	102	DSA
50	Geetanjali Maam	103	103	DSA

RIGHT OUTER JOIN

LECTURER_ID	LECTURER_NAME	COURSE_ID	COURSE_ID	COURSE_NAME
10	DEF	101	101	DSA
30	Geetanjali Maam	100	100	DSA
40	Geetanjali Maam	102	102	DSA
50	Geetanjali Maam	103	103	DSA
20	Geetanjali Maam	101	101	DSA
–	–	–	104	BDES

COUNT(STUDENT_NAME)	STUDENT_ID
1	6

COUNT(LECTURER_NAME)	LECTURER_ID
1	10
1	20
1	30
1	40
1	50

MIN(COURSE_NAME)	COURSE_ID
DSA	100
DSA	101
DSA	102
DSA	103
BDES	104

MAX(COURSE_NAME)	COURSE_ID
DSA	100
DSA	101
DSA	102
DSA	103
BDES	104

COUNT(SUBJECT_NAME)	SUBJECT_ID
1	200
1	202
1	203
1	204

AVG(LECTURER_ID)	COURSE_ID
15	101
50	103
30	100
40	102

COUNT(COURSE_NAME)	COURSE_ID
1	100

COUNT(COURSE_NAME)	COURSE_ID
1	101
1	102
1	103
1	104

COUNT(LECTURER_ID)	COURSE_ID
1	103
1	102
1	100
2	101

AVG(LECTURER_ID)	COURSE_ID
50	103
40	102
30	100
15	101

COUNT(LECTURER_ID)	COURSE_ID
1	100
1	102
1	103
2	101

COUNT(SUBJECT_NAME)	SUBJECT_ID
1	200
1	202
1	203
1	204

COUNT(STUDENT_NAME)	STUDENT_ID
1	6

COUNT(LECTURER_ID)	COURSE_ID
1	103
1	102
1	100
2	101

ID	NAME
1	abc
2	abc
3	abc
21	abc

Sequence s1

ID	NAME
1	abc
2	abc
3	abc
41	abc
4	abc

Sequence s2

ID	NAME
1	abc
2	abc
3	abc

View v1

ID	NAME	MARKS
1	abc	78
2	abc	45
3	abc	90

View v2

ID	NAME	MARKS
1	abc	78
2	abc	45
3	abc	90

View v3

ID	NAME
1	abc
2	abc
3	abc
–	def
41	abc
4	abc

View v4

ID	NAME
1	abc
2	abc
3	abc
–	def
41	abc
10	–
4	abc

View v4