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SEM : 4TH

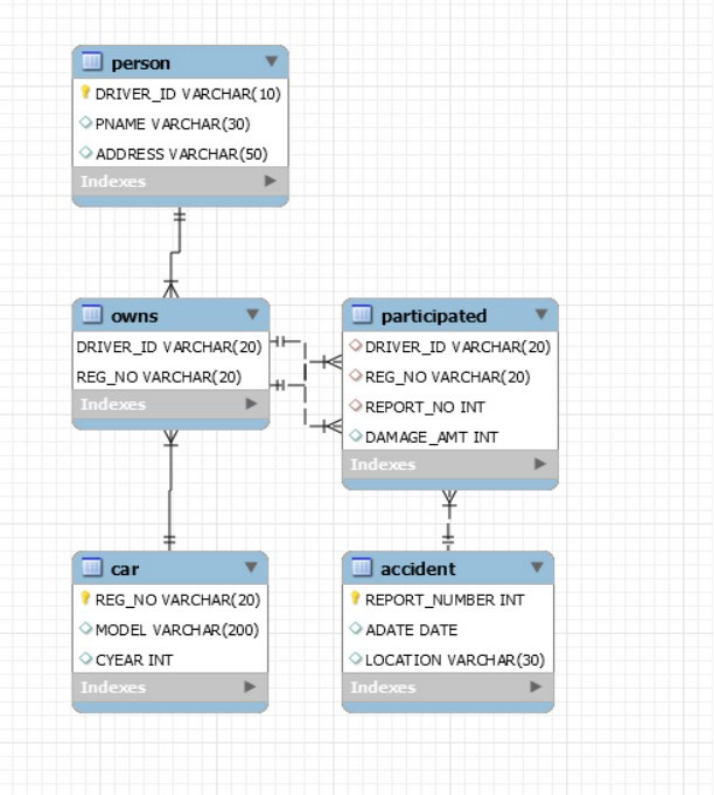
EXAM : CIE 1 (INTERNALS)

Q1) INSURANCE DATABASE

i) SQL FILE

https://github.com/KRISHNADULLOLLLI/DBMS-LAB-PROGRAMS-1BM19CS075-/blob/main/Labprogram_1/insurance_db.sql

ii) ER DIAGRAM



ii) QUERY 1

```
/*(QUERY 1)
Update the damage amount for the car with a specific Regno in the accident with report number 12 to2 5000.*/
UPDATE PARTICIPATED
SET DAMAGE_AMT=25000
WHERE REPORT_NO =12 AND REG_NO = 'KA03L9999';

/* (QUERY 2)
```

Output

Action Output

#	Time	Action	Message
11	18:49:30	INSERT INTO COURSE(COURSE_ID, CNAME, DEPT) VALUES (11, 'DS', 'CS'),(22, 'USP', 'IS'),(33, 'SNS', 'EC'),(44, 'DBMS', 'C...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0
12	18:49:57	INSERT INTO ENROLL(REG_NO, COURSE_ID, SEM, MARKS) VALUES ('CS01', 11, 4, 85),('IS02', 22, 6, 80),('EC03', 33, 2, 80...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0
13	18:51:00	INSERT INTO BOOK_ADOPTION(COURSE_ID,SEM,BOOK_ISBN) VALUES (11,4,1),(11,4,2),(44,6,3),(44,6,4),(55,2,5),(22,6,6),(...	7 row(s) affected Records: 7 Duplicates: 0 Warnings: 0
14	18:51:47	INSERT INTO TEXT(BOOK_ISBN, BOOK_TITLE, PUBLISHER, AUTHOR) VALUES (1, 'DS and C', 'Princeton', 'Padma Reddy')...	6 row(s) affected Records: 6 Duplicates: 0 Warnings: 0
15	18:52:33	INSERT INTO BOOK_ADOPTION VALUES(11, 4, 8)	1 row(s) affected
16	18:53:29	SELECT C.COURSE_ID,T.BOOK_ISBN,T.BOOK_TITLE FROM TEXT T,COURSE C,BOOK_ADOPTION B WHERE T.BOOK_IS...	4 row(s) returned
17	18:55:49	SELECT DISTINCT C.DEPT FROM COURSE C WHERE C.DEPT IN (SELECT C.DEPT FROM COURSE C,BOOK_ADOPTION...	1 row(s) returned
18	18:59:54	use insurance	0 row(s) affected
19	19:00:00	UPDATE PARTICIPATED SET DAMAGE_AMT=25000 WHERE REPORT_NO =12 AND REG_NO = 'KA03L9999'	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0

iii) QUERY 2

```
/* (QUERY 2)
Find the total number of people who owned cars that involved in accidents in 2002.*/
SELECT COUNT(*) FROM ACCIDENT
WHERE ADATE LIKE '2002-__-__';

/* (QUERY 3)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

COUNT(*)
2

iv) QUERY 3

```
/* (QUERY 3)
Find the number of accidents in which cars belonging to a specific model were involved.*/
SELECT COUNT(A.REPORT_NUMBER)
FROM ACCIDENT A, PARTICIPATED P, CAR C
WHERE A.REPORT_NUMBER = P.REPORT_NO
AND
P.REG_NO = C.REG_NO
AND
C.MODEL= 'MARUTHI-DX';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

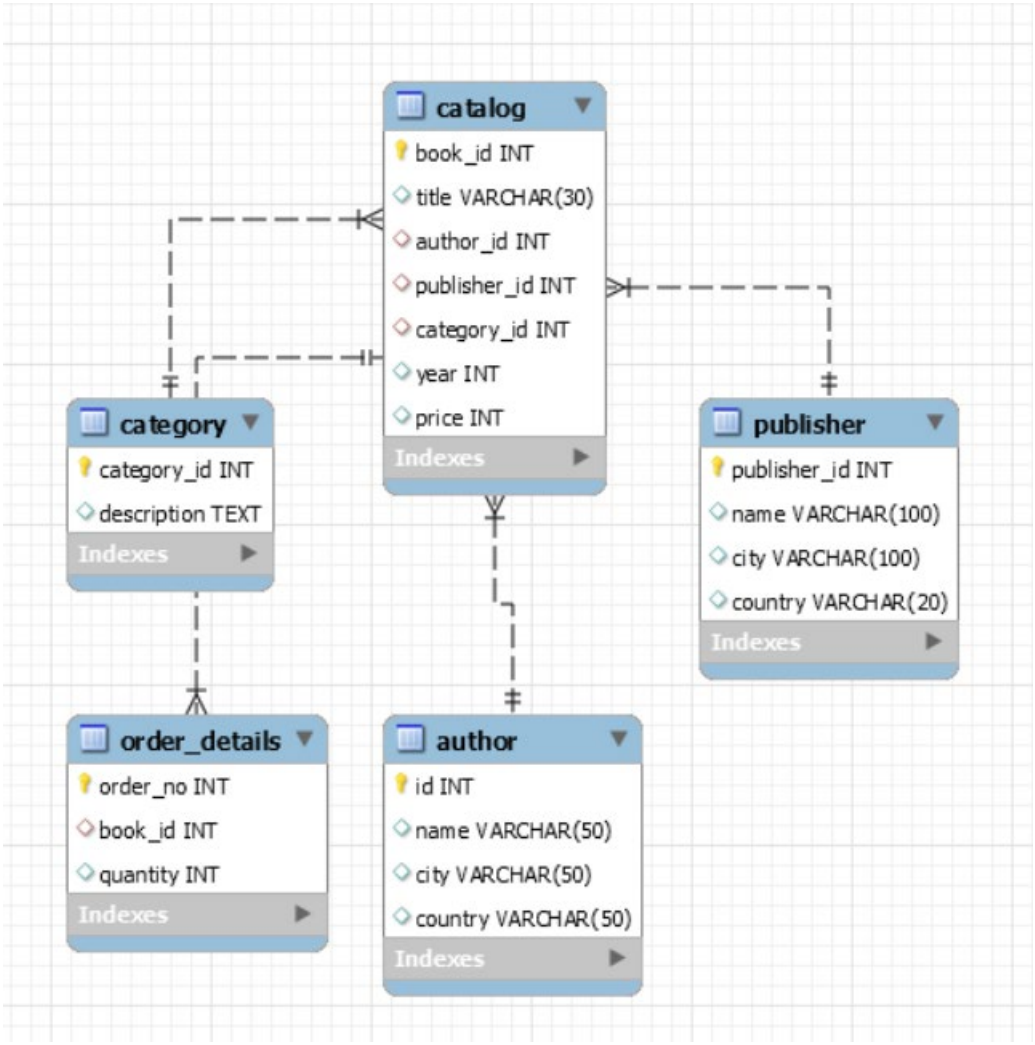
COUNT(A.REPORT_NUMBER)
1

Q2) BOOKDEALER DATABASE

i) SQL FILE

https://github.com/KRISHNADULLOLLLI/DBMS-LAB-PROGRAMS-1BM19CS075-/blob/main/Labprogram_2/Bookdealer_db.sql

ii) ER DIAGRAM



iii) QUERY 1

```
82  /* (QUERY 1)
83  DETAILS OF AUTHOR HAVING ATLEAST 2 BOOKS AND YEAR OF PUB AFTER 2000.*/
84  SELECT * FROM AUTHOR WHERE AUTHOR_ID IN(
85  SELECT AUTHOR_ID FROM CATALOG WHERE YEAR >= 2000 GROUP BY AUTHOR_ID
86   HAVING COUNT(AUTHOR_ID) >=2 );
87
88  /*(QUERY 2)
89  AUTHOR OF BOOKS WITH MAX SALES*/
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

AUTHOR_ID	NAME	CITY	COUNTRY
1005	STRALLINGS	LAS VEGAS	USA
NULL	NULL	NULL	NULL

IV) QUERY 2

```
88  /*(QUERY 2)
89  AUTHOR OF BOOKS WITH MAX SALES*/
90  SELECT A.NAME FROM AUTHOR A,CATALOG C,ORDER_DETAILS O WHERE A.AUTHOR_ID=C.AUTHOR_ID AND
91  C.BOOK_ID=O.BOOK_ID AND O.QUANTITY=(SELECT MAX(QUANTITY) FROM ORDER_DETAILS);
92
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

NAME
KARTHIK BP

V) QUERY 3

```
93  /*(QUERY 3)
94  INCREASE PRICE OF THE BOOK WITH SPECIFIED PUBLISHER BY 10%*/
95  UPDATE CATALOG SET PRICE=(PRICE+PRICE*0.1) WHERE PUBLISHER_ID=5;
96  SELECT * FROM CATALOG;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

BOOK_ID	TITLE	AUTHOR_ID	YEAR	PRICE	PUBLISHER_ID	CATEGORY_ID
11	Unix_System_Prg	1001	2000	251	1	1001
12	Digital_Signals	1002	2001	425	2	1003
13	Logic_Design	1003	1999	225	3	1002
14	Server_Prg	1004	2001	333	4	1004
15	Linux_OS	1005	2003	326	5	1005
16	C++ Bible	1005	2000	526	5	1001

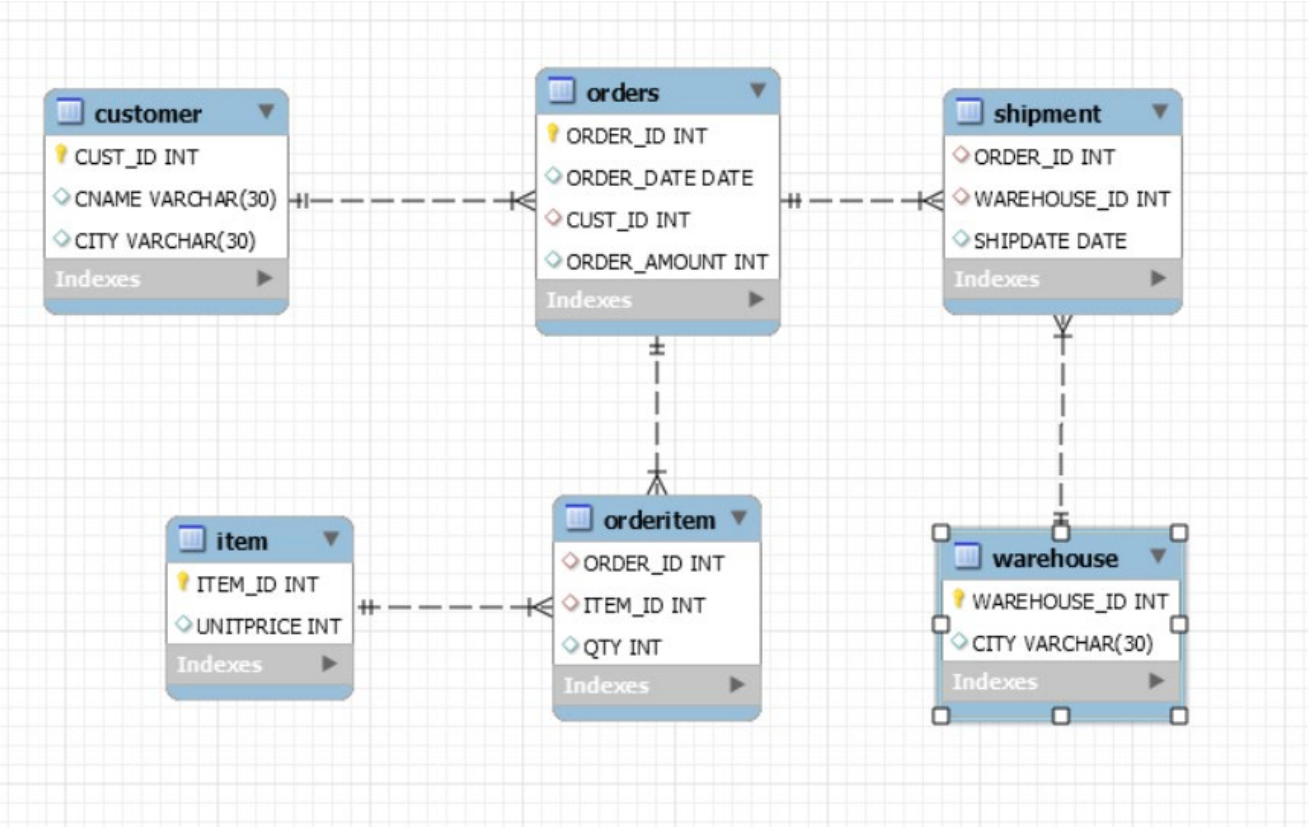
CATALOG 4

Q3) ORDER PROCESS DATABASE

i) SQL FILE

https://github.com/KRISHNADULLOLLLI/DBMS-LAB-PROGRAMS-1BM19CS075-/blob/main/Labprogram_3/OrderProcessing_db.sql

ii) ER DIAGRAM



iii) QUERY 1

```
85  /* (QUERY 1)
86   Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
87   numbers of orders by the customer and the last column is the average order amount for that
88   customer.*/
89  SELECT C.CNAME,COUNT(O.ORDER_ID)
90  AS TOTALORDERS,AVG(O.ORDER_AMOUNT)
91  AS AVG_ORDER_AMT FROM CUSTOMER C,
92  ORDERS O WHERE C.CUST_ID=O.CUST_ID GROUP BY O.CUST_ID;
93
94  /* (QUERY 2)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CNAME	TOTALORDERS	AVG_ORDER_AMT
PUSHPA K	2	19000.0000
LAILA	2	17500.0000
FAIZAL	4	24000.0000
SOURAV	1	29000.0000
SUMAN	1	56000.0000

iv) QUERY 2

```
94  /* (QUERY 2)
95  List the order# for orders that were shipped from all warehouses that the company has in a
96  specific city.*/
97  SELECT S.ORDER_ID FROM SHIPMENT S,
98  WAREHOUSE W WHERE S.WAREHOUSE_ID=W.WAREHOUSE_ID AND W.CITY="BANGALORE";
99
100 /* (QUERY 3)
101 Demonstrate how you delete item# 10 from the ITEM table and make that field null in the
102 ORDER_ITEM table.*/
103 DELETE FROM ITEM WHERE ITEM_ID=5002;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ORDER_ID
112
117

V) QUERY 3

```
100 /* (QUERY 3)
101 Demonstrate how you delete item# 10 from the ITEM table and make that field null in the
102 ORDER_ITEM table.*/
103 DELETE FROM ITEM WHERE ITEM_ID=5002;
104 SELECT * FROM ORDERITEM;
105
106
107
108
109
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ORDER_ID	ITEM_ID	QTY
111	5001	50
112	5003	20
113	5002	50
114	5005	60
115	5004	90
116	5001	10

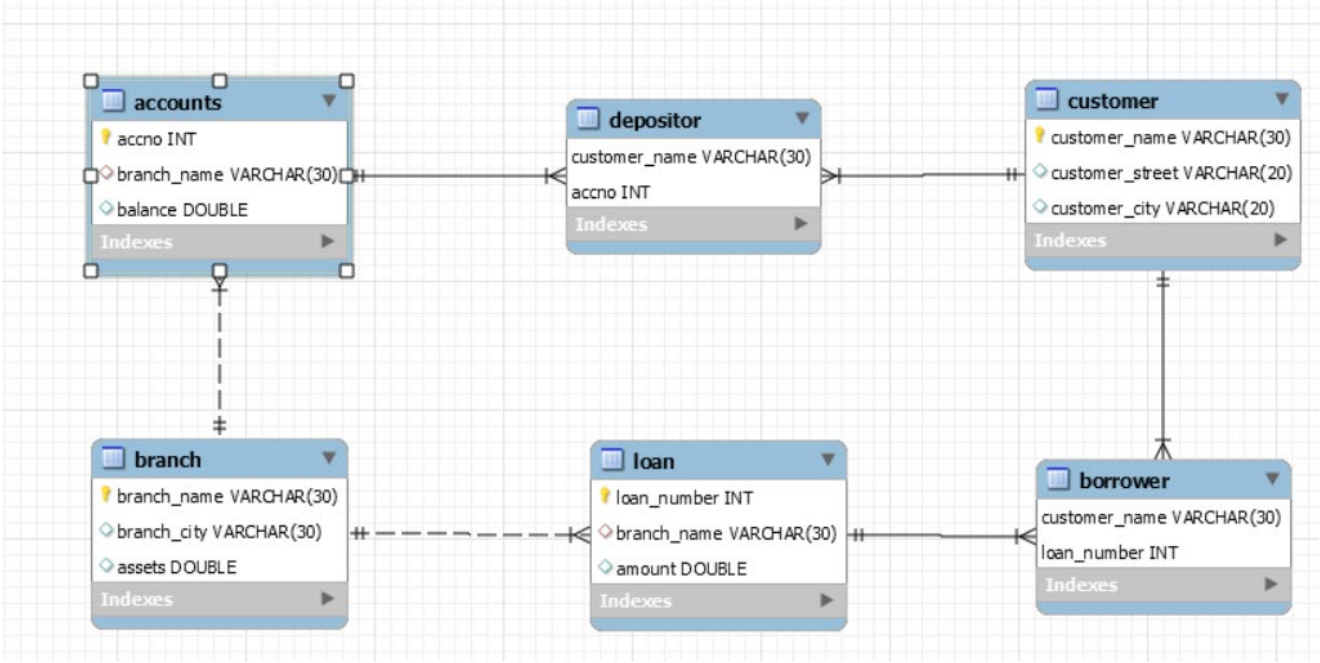
ORDERITEM 3

Q4) BANK ENTERPRISE DATABSE

i) SQL FILE

https://github.com/KRISHNADULLOLLLI/DBMS-LAB-PROGRAMS-1BM19CS075-/blob/main/Labprogram_4/BankEnterprise_db.sql

ii) ER DIAGRAM



iii) QUERY 1

```
80  /* QUERY 1
81   Find all the customers who have at least two accounts at the Main branch.*/
82  select d.customer_name from depositor d,accounts a
83  where d.accno=a.accno and  a.branch_name = "D"
84  group by d.customer_name having count(d.customer_name) >=2;
85
86  /* QUERY 2
87   Find all the customers who have an account at all the branches located in a specific city.*/
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

customer_name
Seema

IV) QUERY 2

```
6   /* QUERY 2
7   Find all the customers who have an account at all the branches located in a specific city.*/
8   select customer_name from depositor
9   join accounts on accounts.accno = depositor.accno
0   join branch on branch.branch_name = accounts.branch_name
1   where branch.branch_city = "Bangalore"
2   GROUP BY depositor.customer_name
3   having count(DISTINCT branch.branch_name) = (SELECT COUNT(branch_name)
4   FROM branch
5   WHERE branch_city = 'Bangalore');
6
```

sult Grid | Filter Rows: | Export: | Wrap Cell Content:

customer_name
Ravi

V) QUERY 3

```
96
97  /* QUERY 3
98  Demonstrate how you delete all account tuples at every branch located in a specific city.*/
99  delete from accounts where branch_name in
100 (select branch_name from branch where branch_city="Delhi");
101
```

Output

Action Output

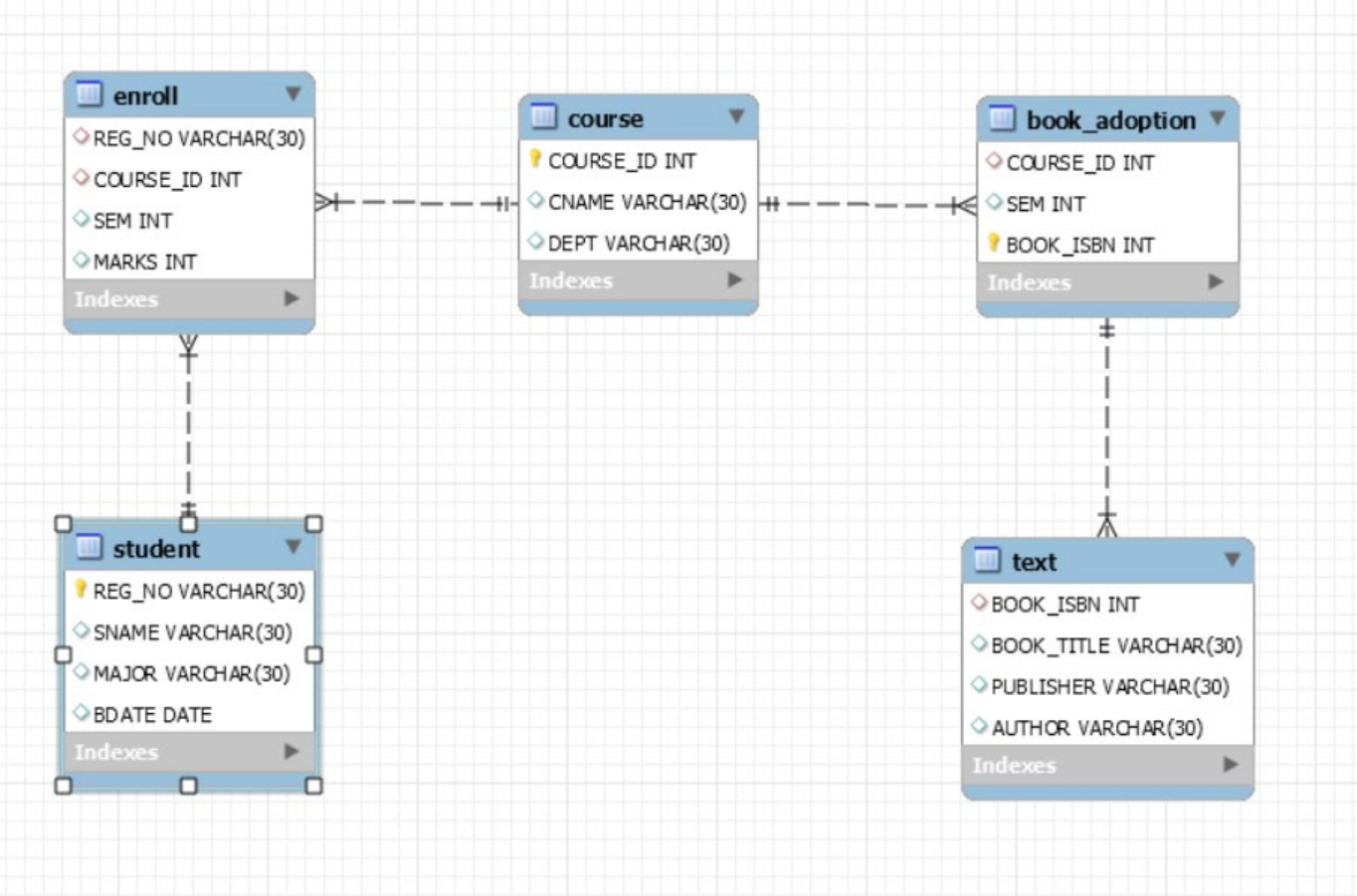
#	Time	Action	Message
29	19:13:51	SELECT S.ORDER_ID FROM SHIPMENT S, WAREHOUSE W WHERE S.WAREHOUSE_ID=W.WAREHOUSE_ID AND W.CI...	2 row(s) returned
30	19:14:26	SELECT * FROM ORDERITEM LIMIT 0, 1000	10 row(s) returned
31	19:15:08	USE BANKING_ENTERPRISE	0 row(s) affected
32	19:16:25	USE BANKING_ENTERPRISE	0 row(s) affected
33	19:16:32	select d.customer_name from depositor d,accounts a where d.accno=a.accno and a.branch_name = "D" group by d.customer_...	1 row(s) returned
34	19:17:11	select customer_name from depositor join accounts on accounts.accno = depositor.accno join branch on branch.branch_name = ...	1 row(s) returned
35	19:17:42	delete from accounts where branch_name in (select branch_name from branch where branch_city="Delhi")	0 row(s) affected

Q5) STUFDENT ENROLLMENT DB

i) SQL FILE

https://github.com/KRISHNADULLOLLLI/DBMS-LAB-PROGRAMS-1BM19CS075-/blob/main/Labprogram_5/StudentEnrollement_db.sql

ii) ER DIAGRAM



iii) QUERY 1

```
/* QUERY 1
Demonstrate how you add a new text book to the database and make this book be adopted by some department.*/
INSERT INTO TEXT VALUES(7, "TREES & GRAPHS", "PRINCETON", "SADGE");
INSERT INTO BOOK_ADOPTION VALUES(11, 4, 8);
SELECT * FROM BOOK_ADOPTION;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

COURSE_ID	SEM	BOOK_ISBN
55	2	5
22	6	6
55	2	7
11	4	8
NULL	NULL	NULL

IV) QUERY 2

```
/* QUWERY 2
Produce a list of text books (include Course #, Book-ISBN, Book-title) in the alphabetical order for courses offered by the 'CS' department that use more than two books.*/
SELECT C.COURSE_ID,T.BOOK_ISBN,T.BOOK_TITLE FROM TEXT T,COURSE C,BOOK_ADOPTION B WHERE T.BOOK_ISBN=B.BOOK_ISBN
AND B.COURSE_ID=C.COURSE_ID AND C.DEPT="CS" AND (SELECT COUNT(B.BOOK_ISBN)
FROM BOOK_ADOPTION B
WHERE C.COURSE_ID=B.COURSE_ID)>=2
ORDER BY T.BOOK_TITLE;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

COURSE_ID	BOOK_ISBN	BOOK_TITLE
11	1	DS and C
44	3	Fundamentals of DBMS
11	2	Fundamentals of DS
44	4	SQL

V) QUERY 3

```
/* QUERY 3
List any department that has all its adopted books published by a specific publisher.*/
SELECT DISTINCT C.DEPT
FROM COURSE C
WHERE C.DEPT
IN (SELECT C.DEPT
FROM COURSE C,BOOK_ADOPTION B,TEXT T
WHERE C.COURSE_ID=B.COURSE_ID
AND T.BOOK_ISBN=B.BOOK_ISBN
AND T.PUBLISHER='Princeton')
AND C.DEPT
NOT IN (SELECT C.DEPT
FROM COURSE C,BOOK_ADOPTION B,TEXT T
WHERE C.COURSE_ID=B.COURSE_ID
AND T.BOOK_ISBN=B.BOOK_ISBN
AND T.PUBLISHER != 'Princeton');
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

DEPT
CS