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GROUP: CDCS1103C

1. Create new database (LEARN)

```
414 • CREATE DATABASE LEARN_ALEESYA;
```

```
✓ 2 14:31:23 CREATE DATABASE LEARN_ALEESYA
```

2. Create table statement.

STUDENT TABLE

```
418 • CREATE TABLE STUDENT (  
419     STUD_ID VARCHAR(10) NOT NULL UNIQUE,  
420     STUD_NAME VARCHAR(50) NOT NULL,  
421     STUD_PROG VARCHAR(15),  
422     STUD_CGPA DECIMAL(5, 2),  
423     PRIMARY KEY (STUD_ID));
```

LECTURER TABLE

```
428 • CREATE TABLE LECTURER (  
429     LEC_ID VARCHAR(6) NOT NULL UNIQUE,  
430     LEC_NAME VARCHAR(50) NOT NULL,  
431     LEC_FACULTY VARCHAR(6),  
432     SALARY DECIMAL(8, 2),  
433     PRIMARY KEY (LEC_ID));  
434
```

TEACH TABLE

```
437 • CREATE TABLE TEACH (  
438     TEACH_ID INTEGER NOT NULL UNIQUE,  
439     STUD_ID VARCHAR(10) NOT NULL,  
440     LEC_ID VARCHAR(6),  
441     SEMESTER VARCHAR(10),  
442     PRIMARY KEY (TEACH_ID),  
443     FOREIGN KEY (STUD_ID) REFERENCES STUDENT(STUD_ID),  
444     FOREIGN KEY (LEC_ID) REFERENCES LECTURER(LEC_ID));  
445
```

3. Insert record into the table.

STUDENT TABLE

```

448 • INSERT INTO STUDENT VALUES ('S1234', 'SITI', 'CS110', 3.1);
449 • INSERT INTO STUDENT VALUES ('S1235', 'MUHAMAD', 'CS143', 3.2);
450 • INSERT INTO STUDENT VALUES ('S1236', 'ALIYA', 'CS111', 3.3);
451 • INSERT INTO STUDENT VALUES ('S1237', 'MUNIR', 'CS143', 2.5);

```

Result Grid				
Filter Rows:				
	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA
▶	S1234	SITI	CS110	3.10
	S1235	MUHAMAD	CS143	3.20
	S1236	ALIYA	CS111	3.30
	S1237	MUNIR	CS143	2.50
✱	NULL	NULL	NULL	NULL

LECTURER TABLE

```

453 • INSERT INTO LECTURER VALUES ('L01', 'NASIR', 'CS143', 3000.00);
454 • INSERT INTO LECTURER VALUES ('L02', 'SITI ROZANA', 'CS110', 4000.00);
455 • INSERT INTO LECTURER VALUES ('L03', 'SAMSIAH', 'CS110', 2500.00);

```

Result Grid				
Filter Rows:				
	LEC_ID	LEC_NAME	LEC_FACULTY	SALARY
▶	L01	NASIR	CS143	3000.00
	L02	SITI ROZANA	CS110	4000.00
	L03	SAMSIAH	CS110	2500.00
✱	NULL	NULL	NULL	NULL

TEACH TABLE

```

457 • INSERT INTO TEACH VALUES (1, 'S1234', 'L01', 'JULAI 19');
458 • INSERT INTO TEACH VALUES (2, 'S1236', 'L01', 'MAC 19');
459 • INSERT INTO TEACH VALUES (3, 'S1236', 'L02', 'MAC 20');
460

```

Result Grid				
Filter Rows:				
	TEACH_ID	STUD_ID	LEC_ID	SEMESTER
▶	1	S1234	L01	JULAI 19
	2	S1236	L01	MAC 19
	3	S1236	L02	MAC 20
✱	NULL	NULL	NULL	NULL

4. Altering the table structure

- a) Add new column stud_DOB in student table. (Show the table record before add and after add)

```
464 • ALTER TABLE STUDENT
465 ADD STUD_DOB DATE;
```

BEFORE ALTER TABLE:

	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA
▶	S1234	SITI	CS110	3.10
	S1235	MUHAMAD	CS143	3.20
	S1236	ALIYA	CS111	3.30
	S1237	MUNIR	CS143	2.50
*	NULL	NULL	NULL	NULL

AFTER ALTER TABLE:

	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB
▶	S1234	SITI	CS110	3.10	NULL
	S1235	MUHAMAD	CS143	3.20	NULL
	S1236	ALIYA	CS111	3.30	NULL
	S1237	MUNIR	CS143	2.50	NULL
*	NULL	NULL	NULL	NULL	NULL

- b) Remove STUD_ADDRESS from student table. (Show the table record before and after remove)

```
467 • ALTER TABLE STUDENT
468 DROP STUD_ADDRESS;
```

BEFORE ALTER TABLE:

	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB	STUD_ADDRESS
▶	S1234	SITI	CS110	3.10	NULL	NULL
	S1235	MUHAMAD	CS143	3.20	NULL	NULL
	S1236	ALIYA	CS111	3.30	NULL	NULL
	S1237	MUNIR	CS143	2.50	NULL	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL

AFTER ALTER TABLE:

	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB
▶	S1234	SITI	CS110	3.10	NULL
	S1235	MUHAMAD	CS143	3.20	NULL
	S1236	ALIYA	CS111	3.30	NULL
	S1237	MUNIR	CS143	2.50	NULL
*	NULL	NULL	NULL	NULL	NULL

5. Update data








- a) Update student name 'Siti' to 'Siti Rahimah' for student ID S1234. (Show table record before and after update)

```
470 • UPDATE STUDENT
471 SET STUD_NAME = 'SITI RAHIMAH'
472 WHERE STUD_ID = 'S1234';
```

BEFORE UPDATE TABLE:

Result Grid			Filter Rows:	<input type="text"/>	Edit:			
	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD DOB			
	S1234	SITI	CS110	3.10	NULL	Edit current row		
	S1235	MUHAMAD	CS143	3.20	NULL			
	S1236	ALIYA	CS111	3.30	NULL			
	S1237	MUNIR	CS143	2.50	NULL			
	NULL	NULL	NULL	NULL	NULL			

AFTER UPDATE TABLE:

Result Grid				Filter Rows:	<input type="text"/>	Edit:			
	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB				
	S1234	SITI RAHIMAH	CS110	3.10	NULL				
	S1235	MUHAMAD	CS143	3.20	NULL				
	S1236	ALIYA	CS111	3.30	NULL				
	S1237	MUNIR	CS143	2.50	NULL				
	NULL	NULL	NULL	NULL	NULL				

- b) Update lecture name to Mohd Nasir and salary 6000.00 for lecturer ID L01. (Show table record before and after update)

```
474 • UPDATE LECTURER
475     SET LEC_NAME = 'MOHD NASIR', SALARY = 6000.00
476     WHERE LEC_ID = 'L01';
```

BEFORE UPDATE TABLE:

Result Grid



Filter Rows:

Ec

	LEC_ID	LEC_NAME	LEC_FACULTY	SALARY
▶	L01	NASIR	CS143	3000.00
	L02	SITI ROZANA	CS110	4000.00
	L03	SAMSI AH	CS110	2500.00
✱	NULL	NULL	NULL	NULL

AFTER UPDATE TABLE:

Result Grid

Filter Rows:

Ec

	LEC_ID	LEC_NAME	LEC_FACULTY	SALARY
▶	L01	MOHD NASIR	CS143	6000.00
	L02	SITI ROZANA	CS110	4000.00
	L03	SAMSI AH	CS110	2500.00
✱	NULL	NULL	NULL	NULL

6. Delete table rows

a) Delete record student where student ID 'S1237'. Show the table before and after delete)

```
478 • DELETE FROM STUDENT
479 WHERE STUD_ID = 'S1237'
```

BEFORE DELETE:

Result Grid					
Filter Rows:					
	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB
▶	S1234	SITI RAHIMAH	CS110	3.10	NULL
	S1235	MUHAMAD	CS143	3.20	NULL
	S1236	ALIYA	CS111	3.30	NULL
	S1237	MUNIR	CS143	2.50	NULL
*	NULL	NULL	NULL	NULL	NULL

AFTER DELETE:

Result Grid					
Filter Rows:					
	STUD_ID	STUD_NAME	STUD_PROG	STUD_CGPA	STUD_DOB
▶	S1234	SITI RAHIMAH	CS110	3.10	NULL
	S1235	MUHAMAD	CS143	3.20	NULL
	S1236	ALIYA	CS111	3.30	NULL
*	NULL	NULL	NULL	NULL	NULL