









Name : Ramzy Izza Wardhana
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Class : IUP CS B – Lab Database

HOMWORK 7


































Subquery

Importing the data (*homework7.sql*) to the database gives:










tb_location Table

				location_code	location_name
<input type="checkbox"/>	 Edit	 Copy	 Delete	INFO01	Laboratorium 1 M Informatika
<input type="checkbox"/>	 Edit	 Copy	 Delete	INFO02	Laboratorium 2 M Informatika
<input type="checkbox"/>	 Edit	 Copy	 Delete	INFO03	Ruang Dosen M Informatika

tb_product

						type_code	location_code	product_code	product_name	total
<input type="checkbox"/>	 Edit	 Copy	 Delete		A001	INFO02	AP004	Papan Tulis	11	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO01	EK0014	Komputer	2	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO01	EK0015	Printer	3	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO01	EK0016	LCD Projector	1	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO02	EK0014	Komputer	8	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO02	EK0015	Printer	6	
<input type="checkbox"/>	 Edit	 Copy	 Delete		E001	INFO02	EK0016	LCD Projector	2	
<input type="checkbox"/>	 Edit	 Copy	 Delete		M001	INFO01	MM011	Meja Komputer	35	
<input type="checkbox"/>	 Edit	 Copy	 Delete		M001	INFO01	MM012	Kursi Hidrolik	30	
<input type="checkbox"/>	 Edit	 Copy	 Delete		M001	INFO02	MM011	Meja Komputer	45	
<input type="checkbox"/>	 Edit	 Copy	 Delete		M001	INFO03	MM012	Kursi Hidrolik	10	

tb_type Table

<div><div>← T →</div><div>▼</div></div>				type_code	type_name	description
<input type="checkbox"/>	 Edit	 Copy	 Delete	A001	ATK	alat tulis kantor
<input type="checkbox"/>	 Edit	 Copy	 Delete	E001	Alat-alat elektronik	alat elektronik
<input type="checkbox"/>	 Edit	 Copy	 Delete	M001	Mebeler	alat mebel

Create SQL query using subquery to:

1. Show the items code, items name, and its quantity where the location in "Laboratorium 2 M Informatika"

```
1 SELECT product_code as Code, product_name as Name, total as Quantity
2 FROM tb_product
3 WHERE location_code = ANY
4     (SELECT location_code
5      FROM tb_location
6      WHERE location_name = "Laboratorium 2 M Informatika");
```

				Code	Name	Quantity
<input type="checkbox"/>	Edit	Copy	Delete	AP004	Papan Tulis	11
<input type="checkbox"/>	Edit	Copy	Delete	EK0014	Komputer	8
<input type="checkbox"/>	Edit	Copy	Delete	EK0015	Printer	6
<input type="checkbox"/>	Edit	Copy	Delete	EK0016	LCD Projector	2
<input type="checkbox"/>	Edit	Copy	Delete	MM011	Meja Komputer	45

2. Show the items code, the name of items which type is "Alat-alat elektronik " and all the items in the "Ruang Dosen M Informatika "

```
1 SELECT product_code as Code, product_name as Name
2 FROM tb_product
3 WHERE type_code IN
4     (SELECT type_code
5      FROM tb_type
6      WHERE type_name = "Alat-alat elektronik")
7 OR location_code IN
8     (SELECT location_code
9      FROM tb_location
10     WHERE location_name = "Ruang Dosen M Informatika");
```

				Code	Name
<input type="checkbox"/>	Edit	Copy	Delete	EK0014	Komputer
<input type="checkbox"/>	Edit	Copy	Delete	EK0015	Printer
<input type="checkbox"/>	Edit	Copy	Delete	EK0016	LCD Projector
<input type="checkbox"/>	Edit	Copy	Delete	EK0014	Komputer
<input type="checkbox"/>	Edit	Copy	Delete	EK0015	Printer
<input type="checkbox"/>	Edit	Copy	Delete	EK0016	LCD Projector
<input type="checkbox"/>	Edit	Copy	Delete	MM012	Kursi Hidrolik

3. Show the item code, item name and the number of items which type is "Alat-alat elektronik" and "Mebeler" located in the "Laboratorium 2 M Informatika "

```

1 SELECT product_code as Code, product_name as Name, total
2 FROM tb_product
3 WHERE type_code IN
4     (SELECT type_code
5      FROM tb_type
6      WHERE type_name = "Mebeler" OR type_name = "Alat-alat Elektronik")
7 AND location_code IN
8     (SELECT location_code
9      FROM tb_location
10     WHERE location_name = "Laboratorium 2 M Informatika");

```

				Code	Name	total
<input type="checkbox"/>				EK0014	Komputer	8
<input type="checkbox"/>				EK0015	Printer	6
<input type="checkbox"/>				EK0016	LCD Projector	2
<input type="checkbox"/>				MM011	Meja Komputer	45

4. Show all information on items except the items which type is "Mebeler" located in the "Laboratorium 2 M Informatika "

```

1 SELECT * FROM tb_product
2 WHERE type_code NOT IN
3     (SELECT type_code
4      FROM tb_type
5      WHERE type_name = "Mebeler")
6 AND location_code NOT IN
7     (SELECT location_code
8      FROM tb_location
9      WHERE location_name = "Laboratorium 2 M Informatika");

```

				type_code	location_code	product_code	product_name	total
<input type="checkbox"/>				E001	INFO01	EK0014	Komputer	2
<input type="checkbox"/>				E001	INFO01	EK0015	Printer	3
<input type="checkbox"/>				E001	INFO01	EK0016	LCD Projector	1

5. Add an item with the name is "Spidol" and item code "AP005" and the other information similar to "Papan Tulis" but the amount of item is 2 times the amount of "Papan Tulis"

```

1 INSERT INTO tb_product
2   SELECT
3     tb_product.type_code,
4     tb_product.location_code,
5     "AP005",
6     "Spidol",
7     total*2 AS total
8   FROM tb_product WHERE product_name = "Papan Tulis"

```

	type_code	location_code	product_code	product_name	total
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A001	INFO02	AP004	Papan Tulis	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A001	INFO02	AP005	Spidol	22
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO01	EK0014	Komputer	2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO01	EK0015	Printer	3
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO01	EK0016	LCD Projector	1

6. Add an item with the name is "Kabel" which will be placed in the "Ruang Dosen M Informatika " with item code "EK0017", type 'E001', and the amount is similar to the amount of all "LCD projectors"

```

1 INSERT INTO tb_product
2   SELECT
3     "E001",
4     (SELECT location_code FROM tb_location WHERE location_name = "Ruang Dosen M Informatika"),
5     "EK0017",
6     "Kabel",
7     (SELECT SUM(total) FROM tb_product WHERE product_name = "LCD Projector");

```

<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO02	EK0014	Komputer	2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO02	EK0015	Printer	6
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO02	EK0016	LCD Projector	2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	E001	INFO03	EK0017	Kabel	3
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	M001	INFO01	MM001	Meja Komputer	25

7. Change the amount of "Komputer" in the "Laboratorium 1 M Informatika" according to the number of "Meja Komputer" in that room

```

1 UPDATE tb_product
2 SET total =
3   (SELECT total FROM tb_product
4     WHERE product_name = "Meja Komputer" AND
5     location_code = (SELECT location_code FROM tb_location
6                       WHERE location_name = "Laboratorium 1 M Informatika"))
7 WHERE product_name = "Komputer" AND location_code = "INFO01";

```

<input type="checkbox"/>				A001	INFO02	AP005	Spidol	22
<input type="checkbox"/>				E001	INFO01	EK0014	Komputer	35
<input type="checkbox"/>				E001	INFO01	EK0015	Printer	3
<input type="checkbox"/>				E001	INFO01	EK0016	LCD Projector	1
<input type="checkbox"/>				E001	INFO02	EK0014	Komputer	8
<input type="checkbox"/>				E001	INFO02	EK0015	Printer	6

8. Change all amount of "Kursi Hidrolik" in each room to the minimum amount of "Meja Komputer"

```

1 UPDATE tb_product
2 SET total =
3     (SELECT MIN(total)
4       FROM tb_product
5       WHERE product_name = "Meja Komputer")
6 WHERE product_name = "Kursi Hidrolik";

```

<input type="checkbox"/>				M001	INFO01	MM011	Meja Komputer	35
<input type="checkbox"/>				M001	INFO01	MM012	Kursi Hidrolik	35
<input type="checkbox"/>				M001	INFO02	MM011	Meja Komputer	45
<input type="checkbox"/>				M001	INFO03	MM012	Kursi Hidrolik	35

9. Delete all data of items in the "Ruang Dosen M Informatika"

```



















1 DELETE FROM tb_product
2 WHERE location_code = ANY
3     (SELECT location_code
4       FROM tb_location
5       WHERE location_name = "Ruang Dosen M Informatika");

```

				type_code	location_code	product_code	product_name	total
<input type="checkbox"/>				A001	INFO02	AP004	Papan Tulis	11
<input type="checkbox"/>				A001	INFO02	AP005	Spidol	22
<input type="checkbox"/>				E001	INFO01	EK0014	Komputer	35
<input type="checkbox"/>				E001	INFO01	EK0015	Printer	3
<input type="checkbox"/>				E001	INFO01	EK0016	LCD Projector	1
<input type="checkbox"/>				E001	INFO02	EK0014	Komputer	8
<input type="checkbox"/>				E001	INFO02	EK0015	Printer	6
<input type="checkbox"/>				E001	INFO02	EK0016	LCD Projector	2
<input type="checkbox"/>				M001	INFO01	MM011	Meja Komputer	35
<input type="checkbox"/>				M001	INFO01	MM012	Kursi Hidrolik	35
<input type="checkbox"/>				M001	INFO02	MM011	Meja Komputer	45

10. Delete all data of items in the "Laboratorium 2 M Informatika" which is not "Mebeler" type

```
1 DELETE FROM tb_product
2 WHERE location_code =
3     (SELECT location_code
4     FROM tb_location
5     WHERE location_name = "Laboratorium 2 M Informatika")
6     AND type_code NOT IN
7     (SELECT type_code
8     FROM tb_type
9     WHERE type_name = "Mebeler");
```

		type_code	location_code	product_code	product_name	total
<input type="checkbox"/>	 Edit  Copy  Delete	E001	INFO01	EK0014	Komputer	35
<input type="checkbox"/>	 Edit  Copy  Delete	E001	INFO01	EK0015	Printer	3
<input type="checkbox"/>	 Edit  Copy  Delete	E001	INFO01	EK0016	LCD Projector	1
<input type="checkbox"/>	 Edit  Copy  Delete	M001	INFO01	MM011	Meja Komputer	35
<input type="checkbox"/>	 Edit  Copy  Delete	M001	INFO01	MM012	Kursi Hidrolik	35
<input type="checkbox"/>	 Edit  Copy  Delete	M001	INFO02	MM011	Meja Komputer	45