



ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ  
UNIVERSITY OF WEST ATTICA

## DEPARTMENT OF INFORMATION AND COMPUTER ENGINEERING

### 3rd LABORATORY EXERCISE

VIEWS UPDATEABLE , NOT UPDATEABLE, SAFE  
UPDATEABLE

#### WORK DETAILS

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**LABORATORY DEPARTMENT:** [06] WEDNESDAY 13:00-14:00

**LABORATORY RESPONSIBILITY :** GAROFALAKI RANIA

**DELIVERY DATE:** 12/29/2023

**SUBMISSION DEADLINE:** 1/5/2024

# DATA BASES II

## STUDENT DETAILS

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**STUDENT SEMESTER:** 9th

**STUDENT STATUS :** UNDERGRADUATE

**PROGRAM OF STUDY :** UNIWA

# DATA BASES II

## CONTENTS

|   |          |
|---|----------|
| <b>DB personnel .....</b>   | <b>7</b> |
| personnel.sql .....   | 7        |
| personnel. png .....  | 9        |
| <b>Activities .....</b>   | <b>9</b> |
| 1. Connect to your system's .....   |          |
| 1.1. Statement .....  | 9        |
| 1.2. Result .....   | 10       |
| 1.3. Snapshot .....   | 10       |
| 2. Check if there is an NW with the name personnel .....  | 11       |
| 2.1. Statement .....  | 11       |
| 2.2. Result .....   | 11       |
| 2.3. Snapshot .....   | 11       |
| 3. Select the DB personnel to use .....   | 12       |
| 3.1. Statement .....  | 12       |
| 3.2. Result .....   | 12       |
| 3.3. Snapshot .....   | 12       |
| 4. Create the view named EMP _ VIEW .....   | 12       |
| 4.1. Statement .....  | 12       |
| 4.2. Result .....   | 12       |
| 4.3. Snapshot .....   | 13       |
| 5. Display the contents of EMP _ VIEW .....   | 13       |
| 5.1. Statement .....  | 13       |
| 5.2. Result .....   | 13       |
| 5.3. Snapshot .....   | 14       |
| New entries in the EMP table also affect the EMP_VIEW view . Test insert , update , delete statements on the EMP table and display their effect on the EMP table and on the EMP _ VIEW view .....                     | 14       |
| 6.1. Statement .....  | 14       |
| 6.2. Result .....   | 16       |
| 6.3. Snapshot .....   | 19       |
| 7. The new entries in the EMP_VIEW view also affect the EMP table . Test insert , update , delete statements on the EMP _ VIEW view and display their effect on the EMP table and the EMP _ VIEW <a href="#">view</a> |          |

# DATA BASES II

|   |          |
|---|----------|
| 7.1. Statement .....  | 21       |
| 7.2. Result .....   | 23       |
| 7.3. Snapshot .....   | 26       |
| 8. Create a view EMP _ ON _ SALES that will display the employees of the SALES department ..... | 28       |
| 8.1. Statement .....  | 28       |
| 8.2. Result .....   | 29       |
| 8.3. Snapshot .....   | 30       |
| 9. Enter data into the EMP .....  | 31 table |
| 9.1. Statement .....  | 31       |
| 9.2. Result .....   | 31       |
| 9.3. Snapshot .....   | 31       |
| 10. Does the data from the step 9 entry appear in the EMP table ? Justify your answer .....     | 31       |
| 10.1. Statement .....   | 31       |
| 10.2. Result .....  | 32       |
| 10.3. Snapshot .....  | 32       |
| 10.4. Justification .....   | 32       |
| 11. Does the record of step 9 appear on the EMP _ ON _ SALES view ? Justify your answer .....   | 33       |
| 11.1. Statement .....   | 33       |
| 11.2. Result .....  | 33       |
| 11.3. Snapshot .....  | 34       |
| 11.4. Justification .....   | 34       |
| 12. Perform data entry on EMP _ ON _ SALES .....  | 35 view  |
| 12.1. Statement .....   | 35       |
| 12.2. Result .....  | 35       |
| 12.3. Snapshot .....  | 35       |
| 13. Does the data from the step 12 entry appear in the EMP table ? Justify your answer .....    | 35       |
| 13.1. Statement .....   | 35       |
| 13.2. Result .....  | 36       |
| 13.3. Snapshot .....  | 36       |
| 13.4. Justification .....   | 36       |
| 14. Does the record of step 12 appear on the EMP _ ON _ SALES view ? Justify your answer .....  | 37       |
| 14.1. Statement .....   | 37       |

# DATA BASES II

|   |         |
|---|---------|
| 14.2. Result .....  | 37      |
| 14.3. Snapshot .....  | 37      |
| 14.4. Justification .....   | 37      |
| 15. Create view EMP _ ON _ SALES _ S .....  | 38      |
| 15.1. Statement .....   | 38      |
| 15.2. Result .....  | 38      |
| 15.3. Snapshot .....  | 39      |
| 16. Enter data on the EMP _ ON _ SALES _ S .....  | 39 view |
| 16.1. Statement .....   | 39      |
| 16.2. Result .....  | 39      |
| 16.3. Snapshot .....  | 40      |
| 17. Does the data from the step 16 entry appear in the EMP table ? Justify your answer .....                | 40      |
| 17.1. Statement .....   | 40      |
| 17.2. Result .....  | 40      |
| 17.3. Snapshot .....  | 41      |
| 17.4. Justification .....   | 42      |
| 18. Does the record of step 16 appear on the EMP _ ON _ SALES _ S view ? Justify your answer .....          | 42      |
| 18.1. Statement .....   | 42      |
| 18.2. Result .....  | 43      |
| 18.3. Snapshot .....  | 43      |
| 18.4. Justification .....   | 43      |
| EMP _ DISTINCT _ NAMES .....  | 44 view |
| 19.1. Statement .....   | 44      |
| 19.2. Result .....  | 44      |
| 19.3. Snapshot .....  | 44      |
| 20. What type of view is EMP _ DISTINCT _ NAMES ? Run the following command and justify the result of ..... | 45      |
| 20.1. Statement .....   | 45      |
| 20.2. Result .....  | 45      |
| 20.3. Snapshot .....  | 45      |
| 20.4. Justification .....   | 45      |
| 21. What type of aspects are the following and what does each of them contain .....                         | 46      |
| 21.1. Statement .....   | 46      |

# DATA BASES II

|  |    |
|--|----|
| 21.2. Result .....   | 47 |
| 21.3. Snapshot .....   | 48 |
| 21.4. Justification .....  | 49 |
| 22. Run the appropriate commands to demonstrate the type of faces you created in step 21 ..... | 49 |
| 22.1. Statement .....  | 49 |
| 22.2. Score .....  | 50 |
| 22.3. Snapshot .....   | 52 |

# DATA BASES II

## DB personnel

### personnel.sql

```
drop database if exists personnel?
```

```
create database personnel?
```

```
use personnel?
```

```
create table
```

```
DEPT (
```

```
DEPTNO numeric( 2),
```

```
DNAME varchar( 24 ),
```

```
LOC char( 23)
```

```
);
```

```
insert into
```

```
DEPT
```

```
(DEPTNO, DNAME, LOC)
```

```
values
```

```
(50, 'SALES', 'ATHENS'),
```

```
(60, 'ACCOUNTING', 'ATHENS'),
```

```
(70, 'PAYROL', 'VOLOS');
```

```
create table
```

```
JOB(
```

```
JOB_CODE numeric( 3),
```

```
JOB_DESCR varchar( 24 ),
```

```
SAL numeric( 10.2)
```

```
);
```

# DATA BASES II

```
insert into  
JOB  
(JOB_CODE, JOB_DESCR, SAL)  
values  
(100, 'SALESMAN', 2000),  
(200, 'ANALYST', 2000),  
(300, 'DBA', 3000);
```

```
create table  
EMP(  
EMPNO numeric( 4),  
NAME varchar( 255 ),  
JOBNO numeric( 3),  
DEPTNO numeric( 2),  
COMM numeric( 10,2)  
);
```

```
insert into  
EMP  
(EMPNO, NAME, JOBNO, DEPTNO, COMM)  
values  
(10, 'Codd', 100, 50, NULL),  
(20, 'Navathe', 200, 50, 450 ),  
(30, 'Elmasri', 300, 60, NULL),  
(40, 'Date', 100, 50, NULL);
```



# DATA BASES II

## personnel. png

| Στήλες                  | Τύπος δεδομένων |
|-------------------------|-----------------|
| DEPT.DEPTNO, EMP.DEPTNO | numeric(2)      |
| DNAME, JOB_DESCR        | varchar(24)     |
| LOC                     | char(23)        |
| JOBCODE, JOBNO          | numeric(3)      |
| SAL, COMM               | numeric(10,2)   |
| EMPNO                   | numeric(4)      |
| PROJECT.P_ID            | int             |
| PROJECT.P_NAME          | varchar(255)    |

Πίνακας 1. Τύποι δεδομένων πινάκων EMP, JOB, DEPT

### EMP

| EMPNO | NAME    | JOBNO | DEPTNO | COMM |
|-------|---------|-------|--------|------|
| 10    | CODD    | 100   | 50     |      |
| 20    | NAVATHE | 200   | 50     | 450  |
| 30    | ELMASRI | 300   | 60     |      |
| 40    | DATE    | 100   | 50     |      |

### JOB

| JOBCODE | JOB_DESCR | SAL  |
|---------|-----------|------|
| 100     | SALESMAN  | 2000 |
| 200     | ANALYST   | 2000 |
| 300     | DBA       | 3000 |

### DEPT

| DEPTNO | DNAME      | LOC    |
|--------|------------|--------|
| 50     | SALES      | ATHENS |
| 60     | ACCOUNTING | ATHENS |
| 70     | PAYROL     | VOLOS  |

Εικόνα 1. Δεδομένα πινάκων EMP, JOB, DEPT

## Activities

### 1. Connect to your system's MySQL using any of the above methods you wish

#### 1.1. Statement

```
"C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
```

Enter password: \*\*\*\*\*

#### 1.2. Result

# DATA BASES II

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 8

Server version: 8.0.35 MySQL Community Server - GPL

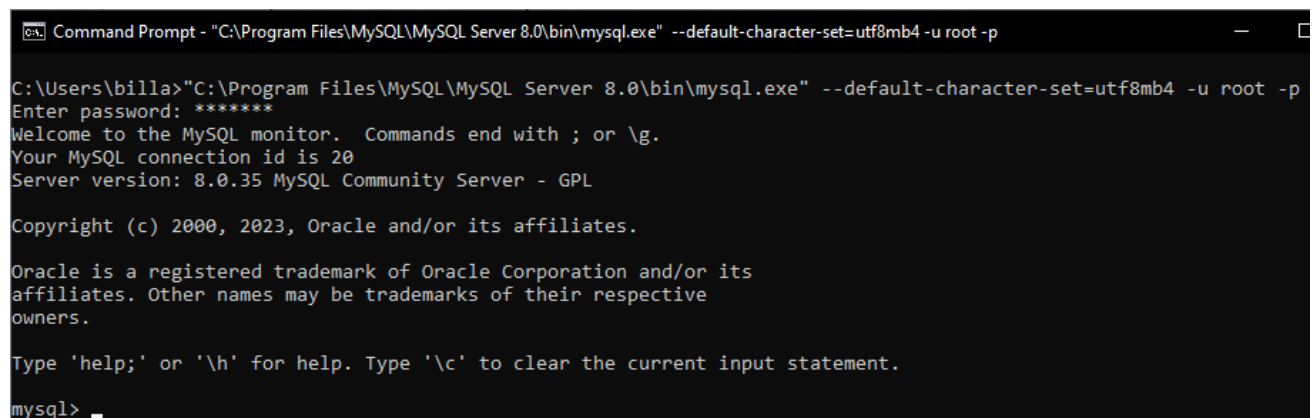
Copyright (c) 2000, 2023, Oracle and/or its affiliates.

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Type 'help?' or '\h' for help. Type '\c' to clear the current input statement.

mysql >

## 1.3. Snapshot



```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
C:\Users\billa>"C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.35 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> _
```

# DATA BASES II

## 2 . Check if there is a DB named personnel

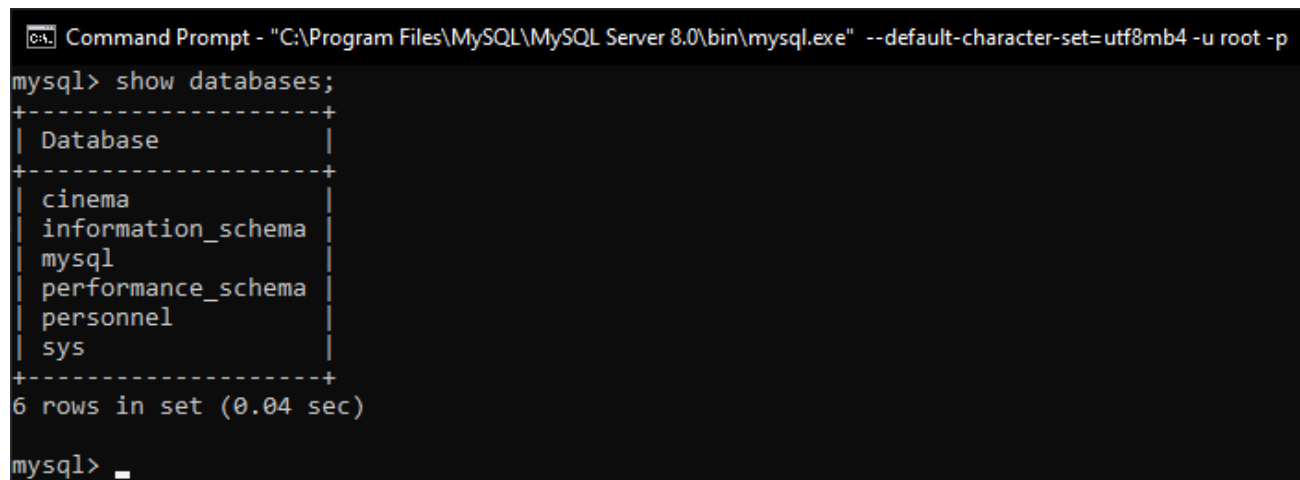
### 2.1. Statement

```
show databases ;
```

### 2.2. Result

```
+-----+
| Database |
+-----+
| cinema |
| information_schema |
| mysql |
| performance_schema |
| personnel |
| sys |
+-----+
6 rows in set (0.04 sec)
```

### 2.3. Snapshot



Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p

```
mysql> show databases;
+-----+
| Database |
+-----+
| cinema |
| information_schema |
| mysql |
| performance_schema |
| personnel |
| sys |
+-----+
6 rows in set (0.04 sec)

mysql> _
```

# DATA BASES II

## 3 . Select the NW personnel to use

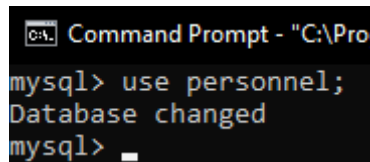
### 3.1. Statement

use personnel?

### 3.2. Result

Database changed

### 3.3. Snapshot



```
C:\> Command Prompt - "C:\Pro
mysql> use personnel;
Database changed
mysql> _
```

## 4. Create the view named EMP\_VIEW

### 4.1. Statement

```
create view EMP_VIEW
( e_ID , e_Name , e_Job , e_Dept , e_Comm )
as
select
EMPNO, NAME, JOBNO, DEPTNO, COMM
from
EMP
;
```

### 4.2. Result

Query OK, 0 rows affected (0.01 sec)

# DATA BASES II

## 4.3 . Snapshot

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8
mysql> create view EMP_VIEW
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> as
-> select
-> EMPNO, NAME, JOBNO, DEPTNO, COMM
-> from
-> EMP
-> ;
Query OK, 0 rows affected (0.01 sec)
mysql> _
```

## 5. Display the contents of EMP\_VIEW

### 5.1. Statement

```
select * from EMP _ VIEW ;
```

### 5.2. Result

```
+-----+-----+-----+-----+-----+
| e _ ID | e _ Name | e _ Job | e _ Dept | e _ Comm |
+-----+-----+-----+-----+-----+
| 10 | SPYROU | 100 | 50 | 450 |
| 20 | CHRISTOU | 200 | 50 | NULL |
| 30 | NIKOY | 300 | 60 | NULL |
| 40 | SPYROU | 200 | 50 | NULL |
+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

# DATA BASES II

## 5.3. Snapshot

```
C:\ Select Command Prompt - "C:\Program Files\MySQL\MySQL Se
mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE   | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

**New entries in the EMP table also affect the EMP\_VIEW view . Test insert , update , delete statements on the EMP table and display their effect on the EMP table and the EMP \_ VIEW view**

## 6.1. Statement

### INSERT

```
insert into
EMP
(EMPNO, NAME, JOBNO, DEPTNO, COMM)
values
(90, 'CLARKE', 100, 50, NULL)
;
...
select * from EMP;
...
select * from EMP_VIEW;
```

# DATA BASES II

## UPDATE

---

update

EMP

set

COMM = 300.0

where

EMPNO = 90

;

...

select \* from EMP;

...

select \* from EMP\_VIEW;

## DELETE

---

delete

from

EMP

where

EMPNO = 90

;

...

select \* from EMP;

...

select \* from EMP\_VIEW;

## 6.2 . Result

### INSERT

Query OK, 1 row affected (0.00 sec)

...

| EMPNO | NAME    | JOBNO | DEPTNO | COMM   |
|-------|---------|-------|--------|--------|
| 10    | CODD    | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE    | 100   | 50     | NULL   |
| 90    | CLARKE  | 100   | 50     | NULL   |

5 rows in set (0.00 sec)

...

| e_ID | e_Name  | e_Job | e_Dept | e_Comm |
|------|---------|-------|--------|--------|
| 10   | CODD    | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE    | 100   | 50     | NULL   |
| 90   | CLARKE  | 100   | 50     | NULL   |

5 rows in set (0.00 sec)



# DATA BASES II

## UPDATE

---

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed : 1 Warnings: 0

...

| EMPNO | NAME    | JOBNO | DEPTNO | COMM   |
|-------|---------|-------|--------|--------|
| 10    | CODD    | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE    | 100   | 50     | NULL   |
| 90    | CLARKE  | 100   | 50     | 300.00 |

5 rows in set (0.00 sec)

...

| e_ID | e_Name  | e_Job | e_Dept | e_Comm |
|------|---------|-------|--------|--------|
| 10   | CODD    | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE    | 100   | 50     | NULL   |
| 90   | CLARKE  | 100   | 50     | 300.00 |

5 rows in set (0.00 sec)

# DATA BASES II

## DELETE

---

Query OK, 1 row affected (0.00 sec)

...

| EMPNO | NAME    | JOBNO | DEPTNO | COMM   |
|-------|---------|-------|--------|--------|
| 10    | CODD    | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE    | 100   | 50     | NULL   |

4 rows in set (0.00 sec)

...

| e_ID | e_Name  | e_Job | e_Dept | e_Comm |
|------|---------|-------|--------|--------|
| 10   | CODD    | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE    | 100   | 50     | NULL   |

4 rows in set (0.00 sec)

## 6.3 . Snapshot

### INSERT

```
C:\> Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" -u root -p
mysql> insert into
-> EMP
-> (EMPNO, NAME, JOBNO, DEPTNO, COMM)
-> values
-> (90, 'CLARKE', 100, 50, NULL)
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM   |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE   | 100   | 50     | NULL   |
| 90    | CLARKE | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE   | 100   | 50     | NULL   |
| 90   | CLARKE | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II

## UPDATE

---

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> update
-> EMP
-> set
-> COMM = 300.0
-> where
-> EMPNO = 90
-> ;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM   |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE   | 100   | 50     | NULL   |
| 90    | CLARKE | 100   | 50     | 300.00 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE   | 100   | 50     | NULL   |
| 90   | CLARKE | 100   | 50     | 300.00 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II

## DELETE

---

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> delete
-> from
-> EMP
-> where
-> EMPNO = 90
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM   |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE   | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE   | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> _
```

**7. New entries in the EMP\_VIEW view also affect the EMP table . Test insert , update , delete statements on the EMP\_VIEW view and display their effect on the EMP table and the EMP\_VIEW view**

### 7.1. Statement

## INSERT

---

insert into

EMP\_VIEW

( e\_ID , e\_Name , e\_Job , e\_Dept , e\_Comm )

# DATA BASES II

```
values
(100, ' adams ', 100, 60, null)
;
...
select * from EMP_VIEW;
...
select * from EMP;
```

## UPDATE

---

```
update
EMP_VIEW
    set
    e_Job = 200
    where
    e_ID = 100
;
...
select * from EMP_VIEW;
...
select * from EMP;
```

## DELETE

---

```
delete
    from
EMP_VIEW
    where
    e_ID = 100
```

# DATA BASES II

```
;
...
select * from EMP_VIEW;
...
select * from EMP;
```

## 7.2. Result

### INSERT

Query OK, 1 row affected (0.00 sec)

...

| e_ID | e_Name  | e_Job | e_Dept | e_Comm |
|------|---------|-------|--------|--------|
| 10   | CODD    | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 30   | ELMASRI | 300   | 60     | NULL   |
| 40   | DATE    | 100   | 50     | NULL   |
| 100  | adams   | 100   | 60     | NULL   |

5 rows in set (0.00 sec)

...

| EMPNO | NAME    | JOBNO | DEPTNO | COMM   |
|-------|---------|-------|--------|--------|
| 10    | CODD    | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |

# DATA BASES II

```
| 40 | DATE | 100 | 50 | NULL |
| 100 | adams | 100 | 60 | NULL |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

## UPDATE

---

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed : 1 Warnings: 0

```
...
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
| 40 | DATE | 100 | 50 | NULL |
| 100 | adams | 200 | 60 | NULL |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
...
+-----+-----+-----+-----+-----+
| EMPNO | NAME | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
| 40 | DATE | 100 | 50 | NULL |
```



# DATA BASES II

```
| 100 | adams | 200 | 60 | NULL |
```

```
+-----+-----+-----+-----+-----+
```

5 rows in set (0.00 sec)

## DELETE

---

Query OK, 1 row affected (0.00 sec)

...

```
+-----+-----+-----+-----+-----+
```

```
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
```

```
+-----+-----+-----+-----+-----+
```

```
| 10 | CODD | 100 | 50 | NULL |
```

```
| 20 | NAVATHE | 200 | 50 | 450.00 |
```

```
| 30 | ELMASRI | 300 | 60 | NULL |
```

```
| 40 | DATE | 100 | 50 | NULL |
```

```
+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

...

```
+-----+-----+-----+-----+-----+
```

```
| EMPNO | NAME | JOBNO | DEPTNO | COMM |
```

```
+-----+-----+-----+-----+-----+
```

```
| 10 | CODD | 100 | 50 | NULL |
```

```
| 20 | NAVATHE | 200 | 50 | 450.00 |
```

```
| 30 | ELMASRI | 300 | 60 | NULL |
```

```
| 40 | DATE | 100 | 50 | NULL |
```

```
+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

# DATA BASES II

## 7.3 . Snapshot

### INSERT

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0"
mysql> insert into
-> EMP_VIEW
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> values
-> (100, 'adams', 100, 60, null)
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50      | NULL    |
| 20   | NAVATHE | 200   | 50      | 450.00  |
| 30   | ELMASRI | 300   | 60      | NULL    |
| 40   | DATE   | 100   | 50      | NULL    |
| 100  | adams  | 100   | 60      | NULL    |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50      | NULL |
| 20    | NAVATHE | 200   | 50      | 450.00 |
| 30    | ELMASRI | 300   | 60      | NULL |
| 40    | DATE   | 100   | 50      | NULL |
| 100   | adams  | 100   | 60      | NULL |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II

## UPDATE

---

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0
mysql> update
-> EMP_VIEW
-> set
-> e_Job = 200
-> where
-> e_ID = 100
-> ;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50      | NULL    |
| 20   | NAVATHE | 200   | 50      | 450.00  |
| 30   | ELMASRI | 300   | 60      | NULL    |
| 40   | DATE   | 100   | 50      | NULL    |
| 100  | adams  | 200   | 60      | NULL    |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM   |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50      | NULL   |
| 20    | NAVATHE | 200   | 50      | 450.00 |
| 30    | ELMASRI | 300   | 60      | NULL   |
| 40    | DATE   | 100   | 50      | NULL   |
| 100   | adams  | 200   | 60      | NULL   |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II

## DELETE

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0"

mysql> delete
-> from
-> EMP_VIEW
-> where
-> e_ID = 100
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> select * from EMP_VIEW;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> _
```

**8. Create a view EMP\_ON\_SALES that will display the employees of the SALES department**

### 8.1. Statement

```
create view
EMP_ON_SALES
( e_ID , e_Name , e_Job , e_Dept , e_Comm )
as
```

# DATA BASES II

```
select
EMPNO, NAME, JOBNO, DEPTNO, COMM
from
EMP
where
DEPTNO
in
(
select
DEPTNO
from
DEPT
where
DNAME = 'SALES'
);
```

## 8.2. Result

Query OK, 0 rows affected (0.00 sec)

# DATA BASES II

## 8.3 . Snapshot

```
C:\> Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" -u root -p
mysql> create view
-> EMP_ON_SALES
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> as
-> select
-> EMPNO, NAME, JOBNO, DEPTNO, COMM
-> from
-> EMP
-> where
-> DEPTNO
-> in
-> (
-> select
-> DEPTNO
-> from
-> DEPT
-> where
-> DNAME = 'SALES'
-> );
Query OK, 0 rows affected (0.00 sec)

mysql> _
```

...

```
C:\> Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" -u root -p
mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM   |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE   | 100   | 50     | NULL   |
| 100   | adams  | 200   | 60     | NULL   |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from EMP_ON_SALES;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 40   | DATE   | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II

## 9 . Enter data into the EMP table

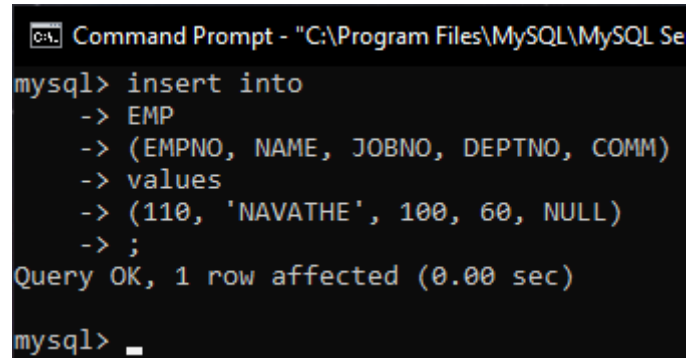
### 9.1. Statement

```
insert into  
EMP  
(EMPNO, NAME, JOBNO, DEPTNO, COMM)  
values  
(110, 'NAVATHE', 100, 60, NULL)  
;
```

### 9.2. Result

Query OK, 1 row affected (0.00 sec)

### 9.3. Snapshot



```
C:\Program Files\MySQL\MySQL Se  
mysql> insert into  
-> EMP  
-> (EMPNO, NAME, JOBNO, DEPTNO, COMM)  
-> values  
-> (110, 'NAVATHE', 100, 60, NULL)  
-> ;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> _
```

## 10. Does the data from the step 9 entry appear in the EMP table ? Justify your answer

### 10.1. Statement

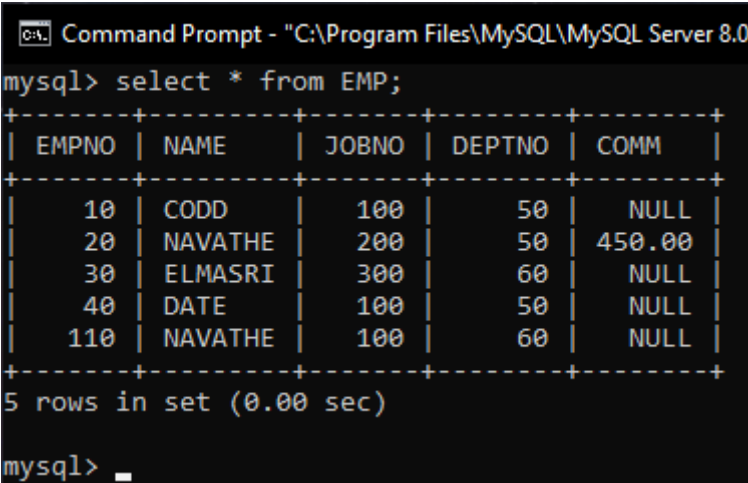
```
select * from EMP;
```

# DATA BASES II

## 10.2 . Result

```
+-----+-----+-----+-----+-----+
| EMPNO | NAME | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
| 40 | DATE | 100 | 50 | NULL |
| 100 | adams | 200 | 60 | NULL |
| 110 | NAVATHE | 100 | 60 | NULL |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

## 10.3. Snapshot



The screenshot shows a Windows Command Prompt window titled "Command Prompt - 'C:\Program Files\MySQL\MySQL Server 8.0'". The prompt is at the mysql> level. The user has entered the command "select \* from EMP;". The output is a table with 5 columns: EMPNO, NAME, JOBNO, DEPTNO, and COMM. The data is as follows:

| EMPNO | NAME    | JOBNO | DEPTNO | COMM   |
|-------|---------|-------|--------|--------|
| 10    | CODD    | 100   | 50     | NULL   |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL   |
| 40    | DATE    | 100   | 50     | NULL   |
| 110   | NAVATHE | 100   | 60     | NULL   |

Below the table, it says "5 rows in set (0.00 sec)". The prompt is now at mysql> \_.

## 10.4. Justification

Obviously, the data from the [step 9 record](#) appears in the EMP table , since the table is a reference, and we immediately update the data with the insert command .



# DATA BASES II

**11 . Are the details of the step 9 record displayed on the EMP \_ ON \_ SALES view ?  
Justify your answer**

## 11.1. Statement

```
select * from EMP_ON_SALES;
```

```
...
```

```
select * from DEPT;
```

## 11.2. Result

```
+-----+-----+-----+-----+-----+
| e_ID | e_ Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

```
...
```

```
+-----+-----+-----+
| DEPTNO | DNAME | LOC |
+-----+-----+-----+
| 50 | SALES | ATHENS |
| 60 | ACCOUNTING | ATHENS |
| 70 | PAYROLL | VOLOS |
+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

# DATA BASES II

## 11.3 . Snapshot

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> select * from EMP_ON_SALES;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10   | CODD   | 100   | 50     | NULL   |
| 20   | NAVATHE | 200   | 50     | 450.00 |
| 40   | DATE   | 100   | 50     | NULL   |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

...

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> select * from DEPT;
+-----+-----+-----+
| DEPTNO | DNAME      | LOC      |
+-----+-----+-----+
| 50     | SALES      | ATHENS   |
| 60     | ACCOUNTING | ATHENS   |
| 70     | PAYROL     | VOLOS    |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

## 11.4. Justification

The view is updatable as it meets all the criteria:

- 1) Not to contain the terms distinct , order by , group by or having
- 2) Do not contain functions ( min , max , avg , count (\*) etc.)
- 3) Not to contain action results
- 4) Do not contain data from more than one table
- 5) Do not contain nested select
- 6) To contain all the columns of the reference table

The record data of [step 9 does not appear in the](#) EMP \_ ON \_ SALES view , because as we declared the EMP \_ ON \_ SALES view in [step 8](#) , we put as a condition after the " where " to handle only the employees who belong to the " SALES " department ", that is, we handle only the records that have as data " DEPTNO " 50 which corresponds to the department " SALES ". In the entry we made in the EMP reference table in [step 9](#) , we set the " DEPTNO " as 60 where it corresponds to the " ACCOUNTING " department as seen in the [screenshot](#) . The result is that the update does not occur on the view.

# DATA BASES II

## 1 2. Enter data on the EMP \_ ON \_ SALES view

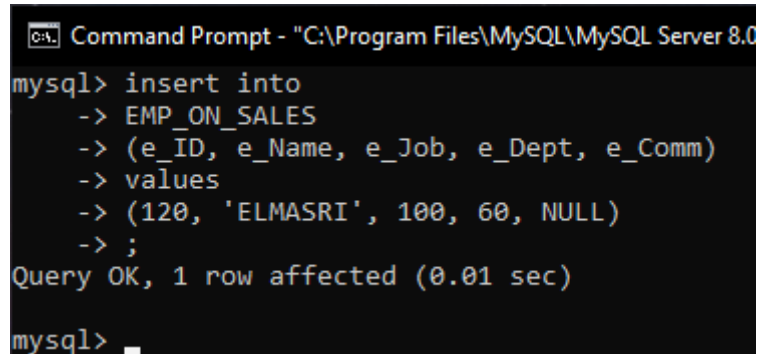
### 12.1. Statement

```
insert into  
EMP_ON_SALES  
( e_ID , e_Name , e_Job , e_Dept , e_Comm )  
values  
(120, 'ELMASRI', 100, 60, NULL)  
;
```

### 12.2. Result

Query OK, 1 row affected (0.01 sec)

### 12.3. Snapshot



```
C:\Program Files\MySQL\MySQL Server 8.0>  
mysql> insert into  
-> EMP_ON_SALES  
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)  
-> values  
-> (120, 'ELMASRI', 100, 60, NULL)  
-> ;  
Query OK, 1 row affected (0.01 sec)  
mysql> _
```

## 13. Does the data from the step 12 entry appear in the EMP table ? Justify your answer

### 13.1. Statement

```
select * from EMP;
```

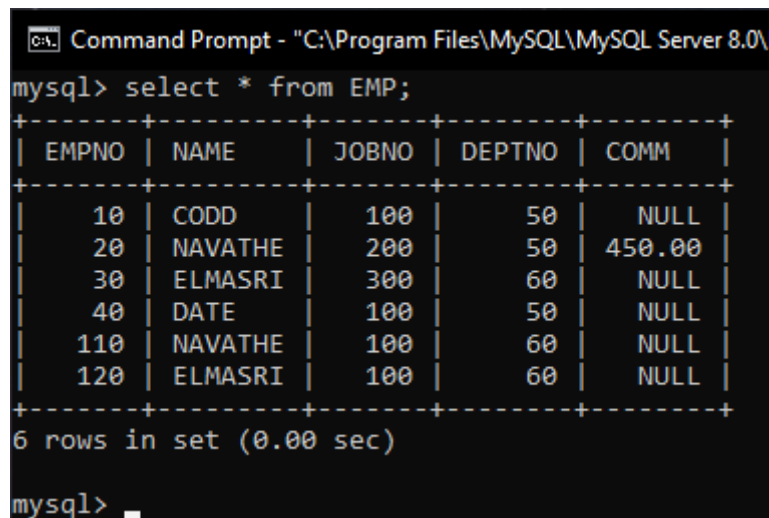
### 13.2 . Result

# DATA BASES II

```
+-----+-----+-----+-----+-----+
| EMPNO | NAME  | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10    | CODD  | 100   | 50     | NULL |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL |
| 40    | DATE  | 100   | 50     | NULL |
| 110   | NAVATHE | 100   | 60     | NULL |
| 120   | ELMASRI | 100   | 60     | NULL |
+-----+-----+-----+-----+-----+

6 rows in set (0.00 sec)
```

## 13.3. Snapshot



```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\
mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME  | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10    | CODD  | 100   | 50     | NULL |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL |
| 40    | DATE  | 100   | 50     | NULL |
| 110   | NAVATHE | 100   | 60     | NULL |
| 120   | ELMASRI | 100   | 60     | NULL |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> _
```

## 13.4. Justification

The data update of the record entered in [step 12](#) was performed in the reference table EMP , even though it was done from the updateable view EMP \_ ON \_ SALES (justification in [step 11](#) ). The reason is that changes to the updatable view are also reflected in the reference table.

**14 . Does the record of step 12 appear in the EMP \_ ON \_ SALES view ? Justify your answer**

# DATA BASES II

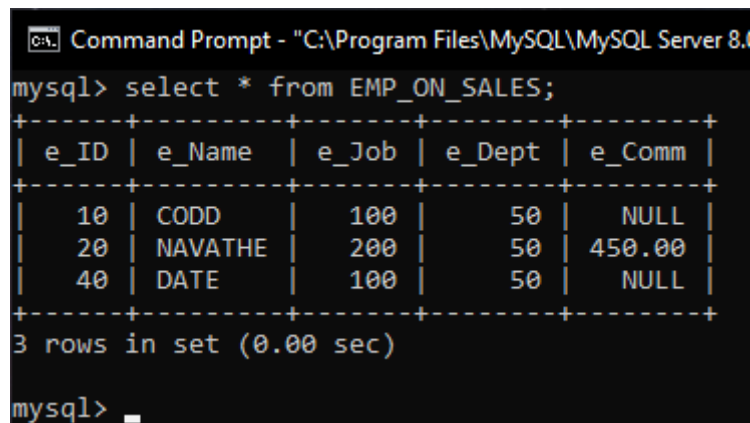
## 14.1. Statement

```
select * from EMP_ON_SALES;
```

## 14.2. Result

```
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

## 14.3. Snapshot



```
mysql> select * from EMP_ON_SALES;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _
```

## 14.4. Justification

The entry of [step 12](#), although done on the EMP\_ON\_SALES view , is only done on the EMP reference table [for](#) the same reason as stated in [HYPERLINK \l "\\_11.4.\\_Αιτιολόγηση" step 11](#) . Correspondingly, here too the data " DEPTNO " is 60 which does not correspond to the employees of the " SALES " department.

## 15 . Create the EMP \_ ON \_ SALES \_ S view

## 15.1. Statement

```
create view
EMP_ON_SALES_S
( e_ID , e_Name , e_Job , e_Dept , e_Comm )
as
select
EMPNO, NAME, JOBNO, DEPTNO, COMM
from
EMP
where
DEPTNO
in
(
select
DEPTNO
from
DEPT
where
DNAME = 'SALES'
)
with check option
;
```

## 15.2. Result

Query OK, 0 rows affected (0.01 sec)

## 15.3 . Snapshot

# DATA BASES II

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> create view
-> EMP_ON_SALES_S
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> as
-> select
-> EMPNO, NAME, JOBNO, DEPTNO, COMM
-> from
-> EMP
-> where
-> DEPTNO
-> in
-> (
-> select
-> DEPTNO
-> from
-> DEPT
-> where
-> DNAME = 'SALES'
-> )
-> with check option
-> ;
Query OK, 0 rows affected (0.01 sec)

mysql> _
```

## 16. Enter data on the EMP \_ ON \_ SALES \_ S view

### 16.1. Statement

```
insert into
EMP_ON_SALES_S
( e_ID , e_Name , e_Job , e_Dept , e_Comm )
values
(130, 'DATE', 100, 60, NULL)
;
```

### 16.2. Result

ERROR 1369 (HY000): CHECK OPTION failed 'personnel.emp\_on\_sales\_s '

### 16.3 . Snapshot

# DATA BASES II

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-ch
mysql> insert into
-> EMP_ON_SALES_S
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> values
-> (130, 'DATE', 100, 60, NULL)
-> ;
ERROR 1369 (HY000): CHECK OPTION failed 'personnel.emp_on_sales_s'
mysql> _
```

**17. Does the data from the step 16 entry appear in the EMP table ? Justify your answer**

## 17.1. Statement

```
select * from EMP;
```

...

[Step 16](#)

...

```
select
```

```
DEPTNO
```

```
from
```

```
DEPT
```

```
where
```

```
DNAME = 'SALES'
```

```
;
```

## 17.2. Result

```
+-----+-----+-----+-----+-----+
| EMPNO | NAME | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 30 | ELMASRI | 300 | 60 | NULL |
```



# DATA BASES II

```
| 40 | DATE | 100 | 50 | NULL |
```

```
| 110 | NAVATHE | 100 | 60 | NULL |
```

```
| 120 | ELMASRI | 100 | 60 | NULL |
```

```
+-----+-----+-----+-----+-----+
```

6 rows in set (0.00 sec)

...

## [Step 16](#)

...

```
+-----+
```

```
| DEPTNO |
```

```
+-----+
```

```
| 50 |
```

```
+-----+
```

1 row in set (0.00 sec)

## 17.3. Snapshot

```
C:\ Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0
mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME   | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10    | CODD   | 100   | 50     | NULL |
| 20    | NAVATHE | 200   | 50     | 450.00 |
| 30    | ELMASRI | 300   | 60     | NULL |
| 40    | DATE   | 100   | 50     | NULL |
| 110   | NAVATHE | 100   | 60     | NULL |
| 120   | ELMASRI | 100   | 60     | NULL |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> _
```

...

# DATA BASES II

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-cha
mysql> insert into
-> EMP_ON_SALES_S
-> (e_ID, e_Name, e_Job, e_Dept, e_Comm)
-> values
-> (130, 'DATE', 100, 60, NULL)
-> ;
ERROR 1369 (HY000): CHECK OPTION failed 'personnel.emp_on_sales_s'
mysql> select
-> DEPTNO
-> from
-> DEPT
-> where
-> DNAME = 'SALES'
-> ;
+-----+
| DEPTNO |
+-----+
|      50 |
+-----+
1 row in set (0.00 sec)

mysql> _
```

## 17.4. Justification

The data of the record entered in [step 16](#) does not appear in the EMP table even though it is a reference table. The reason is because in the EMP\_ON\_SALES\_S view created in step 15 [we](#) used the parameter " with check option » which means that the view is saved. Protected is the updateable view that prevents updates to the reference table that do not meet the conditions we set after the " where ", that is, the condition after the " where " is false.

Indeed, the condition after the ' where ' is a ' select ' statement that returns from the ' DEPT ' table, the ' DEPTNO ' of the department with ' DNAME = ' SALES '. We notice from the [screenshot](#) that the second " select " returns 50, while as input ( e \_ Dept ) we have put 60 for the department with " DNAME = ' SALES '". The condition after " where " is not true, so the data of the record is not updated. Hence the result of the statement of [step 16](#).

**18. Does the record of step 16 appear on the EMP \_ ON \_ SALES \_ S view ? Justify your answer**

## 18.1. Statement

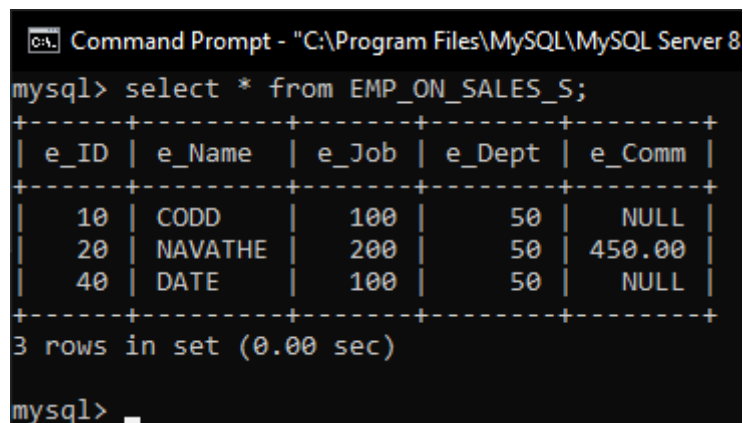
```
select * from EMP_SALES_ON_S;
```

# DATA BASES II

## 18.2. Result

```
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

## 18.3. Snapshot



```
C:\Program Files\MySQL\MySQL Server 8
mysql> select * from EMP_ON_SALES_S;
+-----+-----+-----+-----+-----+
| e_ID | e_Name | e_Job | e_Dept | e_Comm |
+-----+-----+-----+-----+-----+
| 10 | CODD | 100 | 50 | NULL |
| 20 | NAVATHE | 200 | 50 | 450.00 |
| 40 | DATE | 100 | 50 | NULL |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _
```

## 18.4. Justification

The import we are trying to perform in step 12 [does](#) not meet the conditions we set in the EMP\_ON\_SALES\_S view in step 15 . More specifically, the view handles employees working in the " SALES " department with a " DEPTNO " of 50 , while the input is given a " DEPTNO " of 60. The result is that the record data is not displayed on the EMP\_ON\_SALES\_view . S.

# DATA BASES II

## 19 . Create the EMP \_ DISTINCT \_ NAMES view

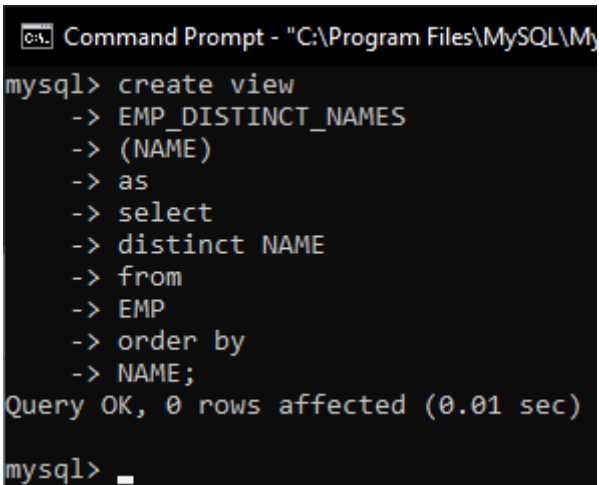
### 19.1. Statement

```
create view  
EMP_DISTINCT_NAMES  
(NAME)  
as  
select  
distinct NAME  
from  
EMP  
order by  
NAME?
```

### 19.2. Result

Query OK, 0 rows affected (0.01 sec)

### 19.3. Snapshot



```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 5.5\bin"  
mysql> create view  
-> EMP_DISTINCT_NAMES  
-> (NAME)  
-> as  
-> select  
-> distinct NAME  
-> from  
-> EMP  
-> order by  
-> NAME;  
Query OK, 0 rows affected (0.01 sec)  
mysql> _
```

# DATA BASES II

**20. What type of view is EMP \_ DISTINCT \_ NAMES ? Run the following command and justify its output**

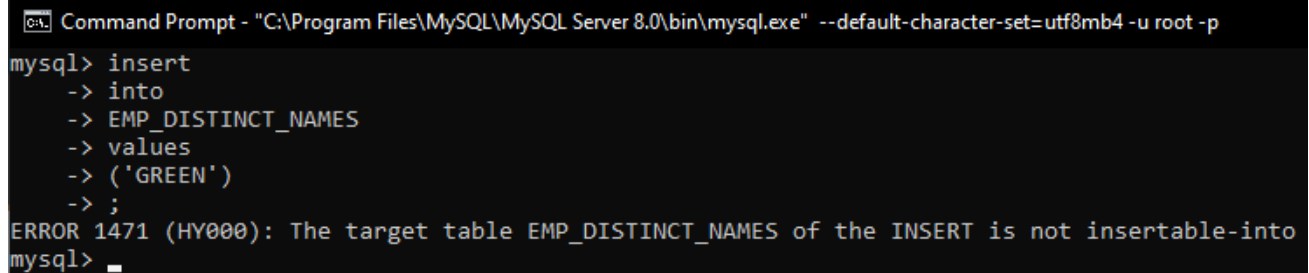
## 20.1. Statement

```
insert  
    into  
EMP_DISTINCT_NAMES  
    values  
( 'GREEN' )  
;
```

## 20.2. Result

ERROR 1471 (HY000): The target table EMP\_DISTINCT\_NAMES of the INSERT is not insertable -into

## 20.3. Snapshot



```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p  
mysql> insert  
-> into  
-> EMP_DISTINCT_NAMES  
-> values  
-> ( 'GREEN' )  
-> ;  
ERROR 1471 (HY000): The target table EMP_DISTINCT_NAMES of the INSERT is not insertable-into  
mysql> _
```

## 20.4. Justification

The EMP \_ DISTINC \_ NAMES view is non-updateable because it does not meet the following condition (all conditions for the view to be updatable are stated in [step 11](#) ) to be updatable:

- 1) Not to contain the terms distinct , order by .

Hence the error message that appears in the [snapshot](#) when we go to update data via insert .

## 2 1. What type of views are the following and what does each of them contain

### 21.1. Statement

```
create view
GROUP_EMP
(DEPT, COUNT_EMP, AVG_COMM)
as
select
DEPTNO, count( *), avg (COMM)
from
EMP
group by
DEPTNO
;
...
create view
EMP_DEPT_VIEW
(EMPNO, NAME, JOBNO, DEPTNO, DNAME)
as
select
EMPNO, NAME, JOBNO, EMP.DEPTNO, DNAME
from
EMP
inner join
DEPT
on
EMP.DEPTNO = DEPT.DEPTNO
```

# DATA BASES II

```
;
...
create view
    new_EMP_DEPT_VIEW
(EMPNO, NAME, JOBNO, DEPTNO)
    as
    select
EMPNO, NAME, JOBNO, EMP.DEPTNO
    from
EMP
    inner join
DEPT
    on
EMP.DEPTNO = DEPT.DEPTNO
;
```

## 21.2. Result

```
Query OK, 0 rows affected (0.00 sec)
...
Query OK, 0 rows affected (0.00 sec)
...
Query OK, 0 rows affected (0.00 sec)
```

# DATA BASES II

## 2 1.3. Snapshot

```
Select Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> create view
-> GROUP_EMP
-> (DEPT, COUNT_EMP, AVG_COMM)
-> as
-> select
-> DEPTNO, count(*), avg(COMM)
-> from
-> EMP
-> group by
-> DEPTNO
-> ;
Query OK, 0 rows affected (0.01 sec)

mysql> _
```

...

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> create view
-> EMP_DEPT_VIEW
-> (EMPNO, NAME, JOBNO, DEPTNO, DNAME)
-> as
-> select
-> EMPNO, NAME, JOBNO, EMP.DEPTNO, DNAME
-> from
-> EMP
-> inner join
-> DEPT
-> on
-> EMP.DEPTNO = DEPT.DEPTNO
-> ;
Query OK, 0 rows affected (0.00 sec)

mysql> _
```

...

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin"
mysql> create view
-> new_EMP_DEPT_VIEW
-> (EMPNO, NAME, JOBNO, DEPTNO)
-> as
-> select
-> EMPNO, NAME, JOBNO, EMP.DEPTNO
-> from
-> EMP
-> inner join
-> DEPT
-> on
-> EMP.DEPTNO = DEPT.DEPTNO
-> ;
Query OK, 0 rows affected (0.00 sec)

mysql> _
```



## 2 1.4. Justification

GROUP \_ EMP is non-updatable because it does not meet the following conditions (all conditions for the view to be updatable are stated in [step 11](#)) to be updatable:

- 1) Do not contain the term group by
- 2) Do not contain the count () and avg () functions

The view contains the commission average ( AVG \_ COMM ) of all employees ( COUNT \_ EMP ) by department ( DEPTNO ).

...

The EMP \_ DEPT \_ VIEW is non-updatable because it does not meet the following condition (all the conditions for the view to be updatable are stated in [step 11](#)) to be updatable:

- 1) Do not contain data from more than one table

Specifically, it contains data of the EMP table ( EMPNO , NAME , JOBNO , DEPTNO ) and the DEPT table ( DNAME ). The view contains the details of all employees ( EMPNO , NAME , JOBNO , DEPTNO ) and the name of the department they work in ( DNAME ).

...

new \_ EMP \_ DEPT \_ VIEW is updatable, as it meets all the conditions for the view to be updatable (the condition statement in [step 11](#)) . It is worth noting that although two tables ( EMP , DEPT ) are joined , the view contains the data of only the EMP table ( EMPNO , NAME , JOBNO , DEPTNO ). The view simply contains the details of all employees ( EMPNO , NAME , JOBNO , DEPTNO )

## 22. Run the appropriate commands to demonstrate the type of faces you created in step

21

### 22.1. Statement

```
insert into
```

```
GROUP_EMP
```

```
(DEPT, COUNT_EMP, AVG_COMM)
```

```
values
```

```
(60, 5, 187.5)
```

```
;
```

```
...
```

# DATA BASES II

```
insert into
EMP_DEPT_VIEW
(EMPNO, NAME, JOBNO, DEPTNO, DNAME)
values
(200, 'ANDRITSOS', 300, 'ACCOUNTING')
;
...
insert into
new_EMP_DEPT_VIEW
(EMPNO, NAME, JOBNO, DEPTNO)
values
(200, 'ANDRITSOS', 300, 60)
;
...
select * from new_EMP_DEPT_VIEW ;
...
select * from EMP;
```

## 22.2. Result

```
ERROR 1471 (HY000): The target table GROUP_EMP of the INSERT is not insertable -
into
...
ERROR 1393 (HY000): Can not modify more than one base table through a join view
' personnel.emp_dept_view '
...
Query OK, 1 row affected (0.00 sec)
...
+-----+-----+-----+-----+
```

# DATA BASES II

| EMPNO | NAME | JOBNO | DEPTNO |
|-------|------|-------|--------|
|-------|------|-------|--------|

|    |      |     |    |
|----|------|-----|----|
| 10 | CODD | 100 | 50 |
|----|------|-----|----|

|    |         |     |    |
|----|---------|-----|----|
| 20 | NAVATHE | 200 | 50 |
|----|---------|-----|----|

|    |         |     |    |
|----|---------|-----|----|
| 30 | ELMASRI | 300 | 60 |
|----|---------|-----|----|

|    |      |     |    |
|----|------|-----|----|
| 40 | DATE | 100 | 50 |
|----|------|-----|----|

|     |         |     |    |
|-----|---------|-----|----|
| 110 | NAVATHE | 100 | 60 |
|-----|---------|-----|----|

|     |         |     |    |
|-----|---------|-----|----|
| 120 | ELMASRI | 100 | 60 |
|-----|---------|-----|----|

|     |           |     |    |
|-----|-----------|-----|----|
| 200 | ANDRITSOS | 300 | 60 |
|-----|-----------|-----|----|

|     |           |     |    |
|-----|-----------|-----|----|
| 200 | ANDRITSOS | 300 | 60 |
|-----|-----------|-----|----|

|     |           |     |    |
|-----|-----------|-----|----|
| 200 | ANDRITSOS | 300 | 60 |
|-----|-----------|-----|----|

7 rows in set (0.00 sec)

...

| EMPNO | NAME | JOBNO | DEPTNO | COMM |
|-------|------|-------|--------|------|
|-------|------|-------|--------|------|

|    |      |     |    |      |
|----|------|-----|----|------|
| 10 | CODD | 100 | 50 | NULL |
|----|------|-----|----|------|

|    |         |     |    |        |
|----|---------|-----|----|--------|
| 20 | NAVATHE | 200 | 50 | 450.00 |
|----|---------|-----|----|--------|

|    |         |     |    |      |
|----|---------|-----|----|------|
| 30 | ELMASRI | 300 | 60 | NULL |
|----|---------|-----|----|------|

|    |      |     |    |      |
|----|------|-----|----|------|
| 40 | DATE | 100 | 50 | NULL |
|----|------|-----|----|------|

|     |         |     |    |      |
|-----|---------|-----|----|------|
| 110 | NAVATHE | 100 | 60 | NULL |
|-----|---------|-----|----|------|

|     |         |     |    |      |
|-----|---------|-----|----|------|
| 120 | ELMASRI | 100 | 60 | NULL |
|-----|---------|-----|----|------|

|     |           |     |    |      |
|-----|-----------|-----|----|------|
| 200 | ANDRITSOS | 300 | 60 | NULL |
|-----|-----------|-----|----|------|

|     |           |     |    |      |
|-----|-----------|-----|----|------|
| 200 | ANDRITSOS | 300 | 60 | NULL |
|-----|-----------|-----|----|------|

|     |           |     |    |      |
|-----|-----------|-----|----|------|
| 200 | ANDRITSOS | 300 | 60 | NULL |
|-----|-----------|-----|----|------|

|     |           |     |    |      |
|-----|-----------|-----|----|------|
| 200 | ANDRITSOS | 300 | 60 | NULL |
|-----|-----------|-----|----|------|

7 rows in set (0.00 sec)

## 2 2.3. Snapshot

# DATA BASES II

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
mysql> insert into
-> GROUP_EMP
-> (DEPT, COUNT_EMP, AVG_COMM)
-> values
-> (60, 5, 187.5)
-> ;
ERROR 1471 (HY000): The target table GROUP_EMP of the INSERT is not insertable-into
mysql> _
```

...

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
mysql> insert into
-> EMP_DEPT_VIEW
-> (EMPNO, NAME, JOBNO, DEPTNO, DNAME)
-> values
-> (200, 'ANDRITSOS', 300, 'ACCOUNTING')
-> ;
ERROR 1393 (HY000): Can not modify more than one base table through a join view 'personnel.emp_dept_view'
mysql> _
```

...

```
Command Prompt - "C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe" --default-character-set=utf8mb4 -u root -p
mysql> insert into
-> new_EMP_DEPT_VIEW
-> (EMPNO, NAME, JOBNO, DEPTNO)
-> values
-> (200, 'ANDRITSOS', 300, 60)
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> select * from new_EMP_DEPT_VIEW;
+-----+-----+-----+-----+
| EMPNO | NAME      | JOBNO | DEPTNO |
+-----+-----+-----+-----+
| 10    | CODD      | 100   | 50     |
| 20    | NAVATHE   | 200   | 50     |
| 30    | ELMASRI   | 300   | 60     |
| 40    | DATE      | 100   | 50     |
| 110   | NAVATHE   | 100   | 60     |
| 120   | ELMASRI   | 100   | 60     |
| 200   | ANDRITSOS | 300   | 60     |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from EMP;
+-----+-----+-----+-----+-----+
| EMPNO | NAME      | JOBNO | DEPTNO | COMM |
+-----+-----+-----+-----+-----+
| 10    | CODD      | 100   | 50     | NULL |
| 20    | NAVATHE   | 200   | 50     | 450.00 |
| 30    | ELMASRI   | 300   | 60     | NULL |
| 40    | DATE      | 100   | 50     | NULL |
| 110   | NAVATHE   | 100   | 60     | NULL |
| 120   | ELMASRI   | 100   | 60     | NULL |
| 200   | ANDRITSOS | 300   | 60     | NULL |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> _
```

# DATA BASES II



Thank you for your attention.

# DATA BASES II

