**Universidad Autónoma de Querétaro**
**Facultad de Informática**
**Base de Datos II**

**Práctica #12. Vistas en Oracle 11g**

**Instrucciones:** Cree las siguientes consultas. Incluya, para cada ejercicio, el comando SQL que generó, así como una captura de pantalla del resultado.

1. Cree una vista llamada EMPLOYEES_VU que muestre el número de empleado, apellido del empleado y el número de departamento de todos los empleados de la tabla EMPLOYEES. Nombre a la columna del apellido del empleado a "EMPLOYEE".

```sql
CREATE OR REPLACE VIEW
    EMPLOYEES_VU
AS
    SELECT e.EMPLOYEE_ID, e.LAST_NAME as Employee, e.DEPARTMENT_ID
    FROM employees e;

SELECT * FROM EMPLOYEES_VU
```

2. Visualice el contenido de la vista EMPLOYEES_VU.

| | EMPLOYEE_ID | EMPLOYEE | DEPARTMENT_ID |
|---|---|---|---|
| 1 | 100 | King | 90 |
| 2 | 101 | Kochhar | 90 |
| 3 | 102 | De Haan | 90 |
| 4 | 103 | Hunold | 60 |
| 5 | 104 | Ernst | 60 |
| 6 | 105 | Austin | 60 |
| 7 | 106 | Pataballa | 60 |
| 8 | 107 | Lorentz | 60 |
| 9 | 108 | Greenberg | 100 |
| 10 | 109 | Faviet | 100 |
| 11 | 110 | Chen | 100 |
| 12 | 111 | Sciarra | 100 |
| 13 | 112 | Urman | 100 |
| 14 | 113 | Popp | 100 |

107 rows

3. Visualice la estructura de la tabla USER_VIEWS con el comando DESCRIBE. Posteriormente, seleccione la columna del nombre de la vista y el texto de la vista de la tabla USER_VIEWS.

```
DESCRIBE USER_VIEWS;
```

```
1    -- auto-generated definition
2    create view USER_VIEWS
3             (VIEW_NAME, TEXT_LENGTH, TEXT, TYPE_TEXT_LENGTH, TYPE_TEXT, OID_TEXT_LENGTH, OID_TEXT, VIEW_TYPE_OWNER,
4              VIEW_TYPE, SUPERVIEW_NAME, EDITIONING_VIEW, READ_ONLY)
5    as
6    -- missing source code
7    /
8
```

Output | SYS.USER_VIEWS ×

Tx: Manual   DDL   CSV

2 758 ms

| | VIEW_NAME | TEXT_LENGTH | TEXT | TYPE_TEXT_I |
|---|---|---|---|---|
| 1 | EMP_DETAILS_VIEW | 538 | SELECT  e.employee_id,  e.job_id… | |
| 2 | SALVU50 | 124 | SELECT        employee_id ID_NUMB… | |
| 3 | DEPARTMENT_SUM_VU | 239 | SELECT d.department_name,      … | |
| 4 | EMPVU20 | 203 | SELECT "EMPLOYEE_ID","FIRST_NAME",… | |
| 5 | EMPVU10 | | ployee_id,        last… | |

6 rows

4. Utilizando la vista EMPLOYEES_VU, cree una consulta para mostrar todos los nombres de empleado y los números de departamento.

```
CREATE OR REPLACE VIEW
    EMPLOYEES_VU
AS
    SELECT  e.LAST_NAME  ||  ' '  ||  e.FIRST_NAME  as  full_name,
e.DEPARTMENT_ID
    FROM EMPLOYEES e;

SELECT * FROM EMPLOYEES_VU
```

5. Cree una vista llamada DEPT_50 que contenga los números de empleado, los apellidos, y los números de departamento para todos los empleados del departamento 50. Etiquete las columnas de la vista como EMPNO, EMPLOYEE y DEPTNO. No permita que se modifique el departamento del empleado a través de la vista.
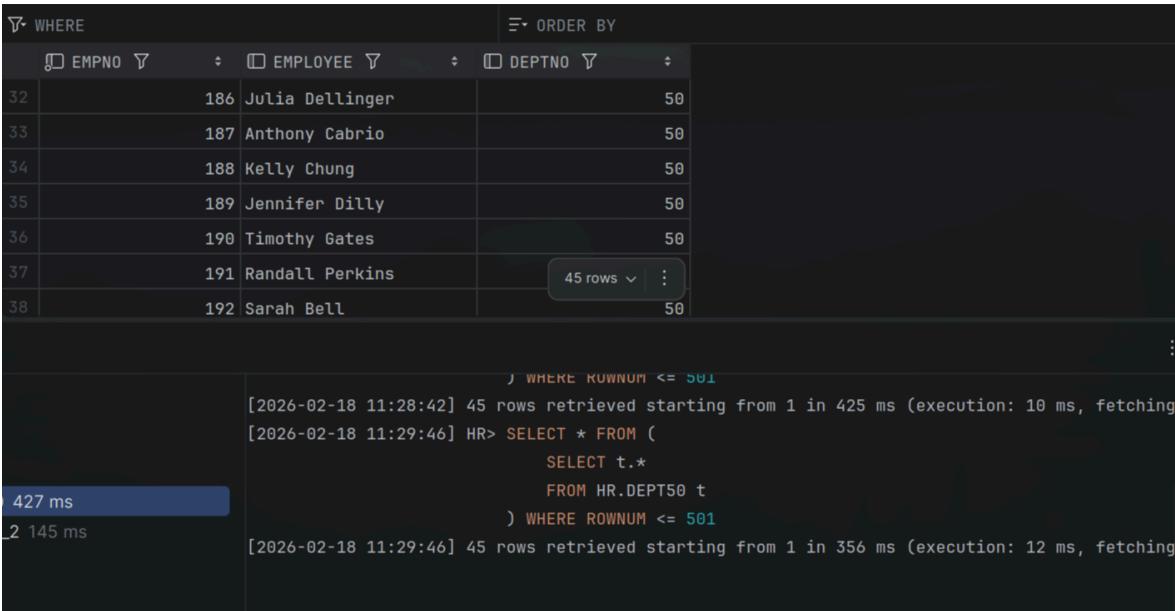
```
CREATE OR REPLACE VIEW DEPT50(EMPNO, EMPLOYEE, DEPTNO)
AS SELECT
        EMPNO employee_id,
        EMPLOYEE FIRST_NAME || ' ' || LAST_NAME,
        DEPTNO DEPARTMENT_ID
FROM EMPLOYEES
WHERE DEPARTMENT_ID = 50
WITH CHECK OPTION CONSTRAINT DEPT50_ck;
```

Output    HR.DEPT50

```
                              FIRST_NAME || ' ' || LAST_NAME,
                              DEPARTMENT_ID
                       FROM EMPLOYEES
                       WHERE DEPARTMENT_ID = 50
                       WITH CHECK OPTION CONSTRAINT DEPT50_ck
[2026-02-18 11:42:22] completed in 26 ms
```

6. Visualice la estructura y contenidos de la vista DEPT_50.

| EMPNO | EMPLOYEE | DEPTNO |
|---|---|---|
| 186 | Julia Dellinger | 50 |
| 187 | Anthony Cabrio | 50 |
| 188 | Kelly Chung | 50 |
| 189 | Jennifer Dilly | 50 |
| 190 | Timothy Gates | 50 |
| 191 | Randall Perkins | 45 rows |
| 192 | Sarah Bell | 50 |

```
) WHERE ROWNUM <= 501
[2026-02-18 11:28:42] 45 rows retrieved starting from 1 in 425 ms (execution: 10 ms, fetching:
[2026-02-18 11:29:46] HR> SELECT * FROM (
                            SELECT t.*
                            FROM HR.DEPT50 t
                       ) WHERE ROWNUM <= 501
[2026-02-18 11:29:46] 45 rows retrieved starting from 1 in 356 ms (execution: 12 ms, fetching:
```

427 ms
2 145 ms

7. Intente reasignar al empleado de apellido "Matos" al departamento 80 a través de la vista DEPT_50. ¿Cuál es el resultado?



No funciona porque se deshabilitaron los comandos que pueden actualizar o modificar una tabla.

8. Cree una vista llamada SALARY_VU basándose en el apellido del empleado, nombre del departamento, salario y cargo de todos los empleados. Utilice las tablas EMPLOYEES y DEPARTMENTS. Etiquete a las columnas "Employee", "Department", "Salary" y "Job", respectivamente.

```
CREATE OR REPLACE VIEW
    SALARY_VU (employee, depatment, salary, job)
AS
    SELECT  e.LAST_NAME, d.DEPARTMENT_NAME, e.SALARY, e.JOB_ID
    FROM EMPLOYEES e, DEPARTMENTS d
    WHERE e.DEPARTMENT_ID = d.DEPARTMENT_ID;
```

| | Switch to Chart | ⬍ | ☐ DEPATMENT ▽ | ⬍ | ☐ SALARY ▽ | ⬍ | ☐ JOB ▽ | ⬍ |
|---|---|---|---|---|---|---|---|---|
| 1 | Whalen | | Administration | | 4400.00 | | AD_ASST | |
| 2 | Hartstein | | Marketing | | 13000.00 | | MK_MAN | |
| 3 | Fay | | Marketing | | 6000.00 | | MK_REP | |
| 4 | Raphaely | | Purchasing | | 11000.00 | | PU_MAN | |
| 5 | Khoo | | Purchasing | | 3100.00 | | PU_CLERK | |
| 6 | Baida | | Purchasing | | 2900.00 | | PU_CLERK | |
| 7 | Tobias | | Purchasing | | 2800.00 | | PU_CLERK | |
| 8 | Himuro | | Purchasing | | 2600.00 | | PU_CLERK | |
| 9 | Colmenares | | Purchasing | | 2500.00 | | PU_CLERK | |
| 10 | Mavris | | Human Resources | | 6500.00 | | HR_REP | |
| 11 | Weiss | | Shipping | | 8000.00 | | ST_MAN | |
| 12 | Fripp | | Shipping | | 8200.00 | | ST_MAN | |
| 13 | Kaufling | | Shipping | | 7000.00 | | ST_MAN | |
| 14 | Vollman | | Shipping | | | | | |
| 15 | Mourgos | | Shipping | | 5800.00 | | ST_MAN | |

106 rows ⌄ ⋮

9. Ejecute la siguiente consulta: CREATE TABLE depas AS SELECT * FROM departments;

```
CREATE TABLE depas AS SELECT * FROM departments;
```

⌨ Output    ▦ SALARY_VU

```
[2026-02-18 11:34:24] HR> CREATE TABLE depas AS SELECT * FROM departments
[2026-02-18 11:34:24] 27 rows affected in 74 ms
```

10. Visualice la estructura y los datos de la tabla DEPAS.

**Data Source:** hr
**Schema:** HR
**Table:** DEPAS

```
-- auto-generated definition
create table DEPAS
(
    DEPARTMENT_ID   NUMBER(4),
    DEPARTMENT_NAME VARCHAR2(30) not null,
    MANAGER_ID      NUMBER(6),
    LOCATION_ID     NUMBER(4)
)
/
```

Show table preview

| | DEPARTMENT_ID | DEPARTMENT_NAME | MANAGER_ID | LOCATION_ID |
|---|---|---|---|---|
| 1 | 10 | Administration | 200 | 1700 |
| 2 | 20 | Marketing | 201 | 1800 |
| 3 | 30 | Purchasing | 114 | 1700 |
| 4 | 40 | Human Resources | 203 | 2400 |
| 5 | 50 | Shipping | 121 | 1500 |
| 6 | 60 | IT | 103 | 1400 |
| 7 | 70 | Public Relations | 204 | 2700 |
| 8 | 80 | Sales | 145 | 2500 |
| 9 | 90 | Executive | 100 | 1700 |
| 10 | 100 | Finance | 108 | 1700 |
| 11 | 110 | Accounting | 205 | 1700 |
| 12 | 120 | Treasury | <null> | 1700 |
| 13 | 130 | Corporate Tax | <null> | 1700 |
| 14 | 140 | Control And Credit | <null> | 1700 |
| 15 | 150 | Shareholder Services | <null> | 1700 |
| 16 | 160 | Benefits | <null> | 1700 |
| 17 | 170 | Manufacturing | <null> | 1700 |
| 18 | 180 | Construction | <null> | 1700 |
| 19 | 190 | Contracting | <null> | 1700 |
| 20 | 200 | Operations | <null> | 1700 |

27 rows

11. Cree una vista nueva llamada V_DEPAS que muestre todos los datos de la tabla DEPAS. No permita aplicar ningún DML sobre los datos de la vista.

```
CREATE OR REPLACE VIEW
    V_DEPAS
AS
    SELECT *
    FROM DEPAS
WITH READ ONLY;
```

12. Elimine la tabla DEPAS (con el comando DROP TABLE) y seleccione los datos de la vista
V_DEPAS. ¿Cuál es el resultado?

```
DROP TABLE DEPAS;
SELECT * FROM V_DEPAS;
 [2026-02-18 11:44:56] HR> SELECT * FROM V_DEPAS
 [2026-02-18 11:44:56] [72000][4063]
 [2026-02-18 11:44:56]   ORA-04063: view "HR.V_DEPAS" has errors
 [2026-02-18 11:44:56]   https://docs.oracle.com/error-help/db/ora-04063/
 [2026-02-18 11:44:56] Position: 14
```

No funciona porque la vista V_DEPAS está intentando obtener los registros de la tabla que
acabamos de borrar.