



**UNIVERSIDAD AUTÓNOMA DE ZACATECAS
INGENIERÍA DE SOFTWARE
SISTEMAS DE BASE DE DATOS II**

TÍTULO:	Ejercicio del Capítulo 6
OBJETIVO:	Realizar ejercicios sobre el Capítulo 6
DURACIÓN:	
FECHA:	
FECHA DE ENTREGA:	

ACTIVIDADES A REALIZAR:

ACTIVIDAD 1: Elabore las siguientes consultas sobre la base de datos HR:

1. Mencione los diferentes tipos de uniones que maneja Oracle.
2. Mencione las características de un NATURAL JOIN.
3. Explique las diferencias entre un NATURAL JOIN y un JOIN USING.
4. Explique el funcionamiento de cada una de las siguientes consultas:

```
Query 1: select * from locations natural join countries;  
Query 2: select * from locations, countries  
where locations.country_id = countries.country_id;  
Query 3: select * from jobs natural join countries;  
Query 4: select * from jobs, countries;
```

5. Explique el funcionamiento de cada una de las siguientes consultas:

```
Query 1: select * from locations join countries using (country_id);  
Query 2: select * from locations, countries  
where locations.country_id = countries.country_id;  
Query 3: select * from jobs join countries using ;
```

6. Elabore una sentencia SELECT que muestre el siguiente resultado:

	EMPLOYEE_ID	LAST_NAME	START_DATE	HIRE_DATE	END_DATE	PREVIOUS_JOB	CURRENT_JOB
1	200	Whalen	17/SEP/87	17/SEP/87	17/JUN/93	AD_ASST	AD_ASST
2	201	Hartstein	17/FEB/96	17/FEB/96	19/DEC/99	MK_REP	MK_MAN
3	101	Kochhar	21/SEP/89	21/SEP/89	27/OCT/93	AC_ACCOUNT	AD_VP
4	102	De Haan	13/JAN/93	13/JAN/93	24/JUL/98	IT_PROG	AD_VP
5	176	Taylor	24/MAR/98	24/MAR/98	31/DEC/98	SA_REP	SA_REP
6	176	Taylor	24/MAR/98	24/MAR/98	31/DEC/99	ST_CLERK	SA_REP

7. Elabore una sentencia SELECT que muestre el siguiente resultado:

	Managers
1	Jennifer Whalen is manager of the Administration department.
2	Michael Hartstein is manager of the Marketing department.
3	Susan Mavris is manager of the Human Resources department.
4	Hermann Baer is manager of the Public Relations department.
5	Shelley Higgins is manager of the Accounting department.
6	Steven King is manager of the Executive department.
7	Alexander Hunold is manager of the IT department.
8	Nancy Greenberg is manager of the Finance department.
9	Den Raphaely is manager of the Purchasing department.
10	Adam Fripp is manager of the Shipping department.
11	John Russell is manager of the Sales department.

8. Explique el funcionamiento de cada una de las siguientes consultas:

Query 1: select d.department_name from departments d
join locations l on (l.LOCATION_ID=d.LOCATION_ID)
where d.department_name like 'P%'

Query 2: select d.department_name from departments d
join locations l on
(l.LOCATION_ID=d.LOCATION_ID and d.department_name like 'P%')

9. Elabore las sentencias necesarias para crear la tabla e insertar los datos de lo siguiente:

JOB_GRADES

	GRADE_LEVEL	LOWEST_SAL	HIGHEST_SAL
1	A	1000	2999
2	B	3000	5999
3	C	6000	9999
4	D	10000	14999
5	E	15000	24999
6	F	25000	40000

10. Elabore una sentencia SELECT que muestre el siguiente resultado:

	LAST_NAME	SALARY	GRADE_LEVEL
1	Vargas	2500	A
2	Matos	2600	A
3	Davies	3100	B
4	Rajs	3500	B
5	Lorentz	4200	B
6	Whalen	4400	B
7	Mourgos	5800	B
8	Ernst	6000	C
9	Fay	6000	C
10	Grant	7000	C

11. Explique el funcionamiento de cada una de las siguientes consultas:

Query 1: select e.employee_id, e.department_id EMP_DEPT_ID,
d.department_id DEPT_DEPT_ID, d.department_name
from departments d left outer join employees e
on (d.DEPARTMENT_ID=e.DEPARTMENT_ID)
where d.department_name like 'P%'

Query 2: select e.employee_id, e.department_id EMP_DEPT_ID,
d.department_id DEPT_DEPT_ID, d.department_name
from departments d join employees e
on (d.DEPARTMENT_ID=e.DEPARTMENT_ID)
where d.department_name like 'P%'

12. Elabore una sentencia SELECT que muestre el siguiente resultado:

	JOBS IN JOB_HISTORY	JOBS IN EMPLOYEES
1	AC_ACCOUNT	AC_ACCOUNT
2	AC_MGR	AC_MGR
3	AD_ASST	AD_ASST
4	IT_PROG	IT_PROG
5	MK_REP	MK_REP
6	SA_MAN	SA_MAN
7	SA_REP	SA_REP
8	ST_CLERK	ST_CLERK
9	(null)	AD PRES
10	(null)	AD_VP
11	(null)	FI_ACCOUNT
12	(null)	FI_MGR
13	(null)	HR_REP
14	(null)	MK_MAN
15	(null)	PR_REP
16	(null)	PU_CLERK
17	(null)	PU_MAN
18	(null)	SH_CLERK
19	(null)	ST_MAN

13. Elabore una sentencia SELECT que muestre el siguiente resultado:

	LAST_NAME	DEPARTMENT_NAME
1	Grant	(null)
2	(null)	NOC
3	(null)	Manufacturing
4	(null)	Government Sales
5	(null)	IT Support
6	(null)	Benefits
7	(null)	Shareholder Services
8	(null)	Retail Sales
9	(null)	Control And Credit
10	(null)	Recruiting
11	(null)	Operations
12	(null)	Treasury
13	(null)	Payroll
14	(null)	Corporate Tax
15	(null)	Construction
16	(null)	Contracting
17	(null)	IT Helpdesk

14. Explique el funcionamiento de la siguiente consulta:

```

REGION_NAME          COUNTRY_NAME
-----
Asia                  Argentina
Asia                  Australia
Asia                  Belgium
Asia                  Brazil
Asia                  Canada
Asia                  China
Asia                  Denmark
Asia                  Egypt
Asia                  France
Asia                  Germany
Asia                  HongKong
Asia                  India
Asia                  Israel
Asia                  Italy
Asia                  Japan
Asia                  Kuwait
Asia                  Mexico
Asia                  Netherlands
Asia                  Nigeria
Asia                  Singapore
Asia                  Switzerland
Asia                  United Kingdom
Asia                  United States of America
Asia                  Zambia
Asia                  Zimbabwe
Middle East and Africa Argentina
Middle East and Africa Australia
Middle East and Africa Belgium
Middle East and Africa Brazil
Middle East and Africa Canada
Middle East and Africa China
Middle East and Africa Denmark
Middle East and Africa Egypt
Middle East and Africa France
Middle East and Africa Germany
Middle East and Africa HongKong
Middle East and Africa India
Middle East and Africa Israel
Middle East and Africa Italy
Middle East and Africa Japan
Middle East and Africa Kuwait
Middle East and Africa Mexico
Middle East and Africa Netherlands
Middle East and Africa Nigeria
Middle East and Africa Singapore
Middle East and Africa Switzerland
Middle East and Africa United Kingdom
Middle East and Africa United States of America
Middle East and Africa Zambia
Middle East and Africa Zimbabwe

50 rows selected.

```

15. Elabore una Sentencia SELECT que muestre todos los empleados que hay registrados en la tabla, y en de que tengan un departamento asignado, mostrar el nombre de dicho departamento.

ACTIVIDAD 2: Para la base de datos de "Hotel", elabore 3 sentencias SELECT para cada uno de los siguientes tipos de JOIN:

- **NATURAL JOIN**
- **JOIN USING**
- **JOIN ON**
- **SELF-JOIN***
- **NONEQUIJOIN***
- **LEFT OUTER JOIN**
- **RIGHT OUTER JOIN**
- **FULL OUTER JOIN**
- **CROSS JOIN**