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

TITULO:	**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:

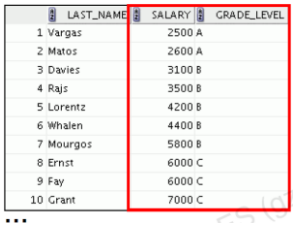
```
Query 1: select d.department_name from departments d
join locations l on (l.LOCATION_ID=d.LOCATION_ID)
where d.department_name like 'P%'

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 datas 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**