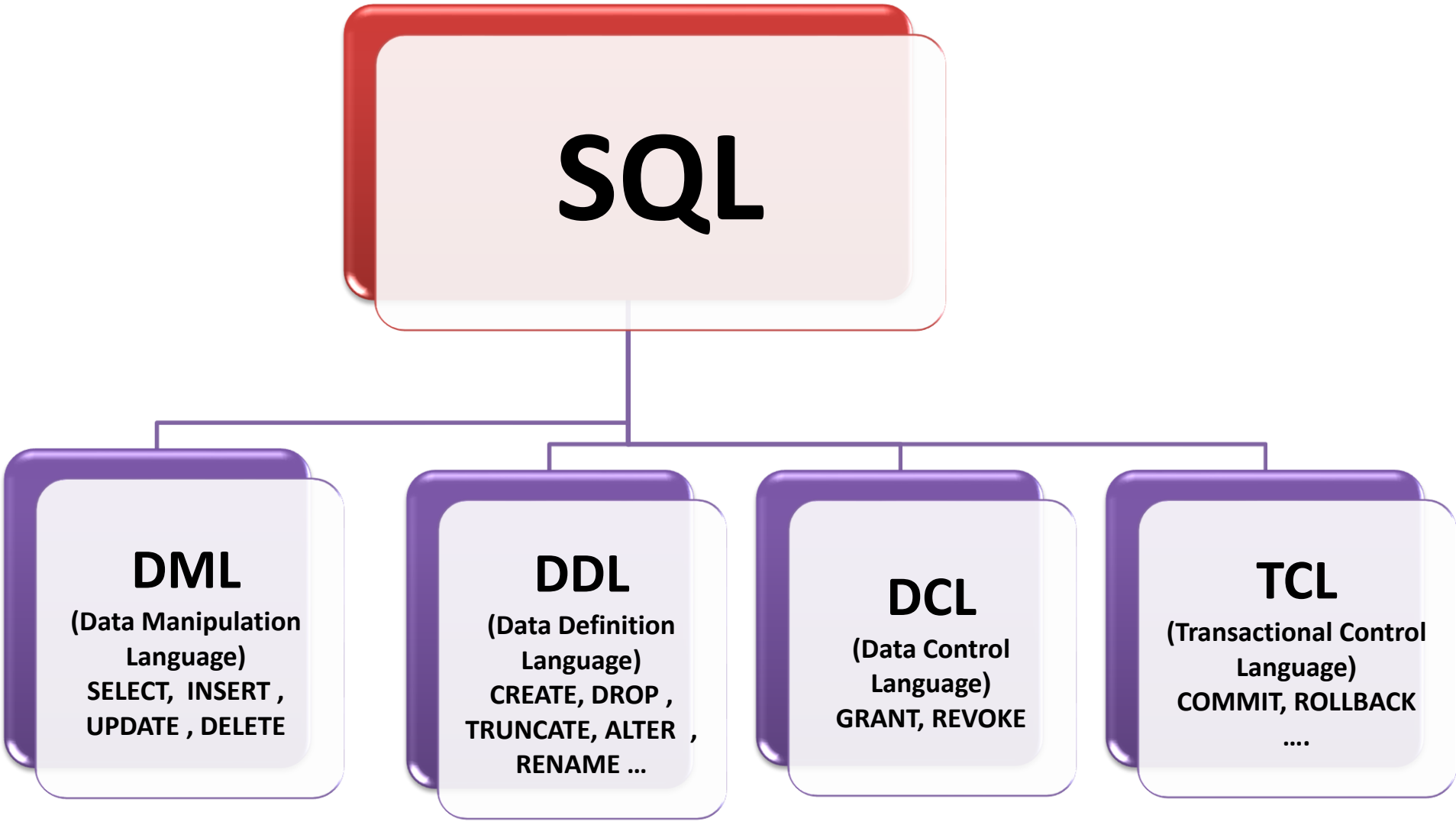
نظم قواعد المعطيات المتقدمة

الجلسة الأولى



Note : DDL & DCL are autocommit (do commit implicitly)

Create Table

Create Table:

```
create table employee
(emp_id number(4,0) Primary Key,
 first_name varchar(30));
```

Describe Table:

```
Desc employee
```

Alter Table

Change details of table:

- Alter table employee rename column first_name to f_name;
- Alter table employee add last_name varchar(20);
- Alter table employee modify last_name varchar(40);

Rename table:

- Alter table employee rename to emp;

Drop Table

Delete Table:

Drop table emp;

TO_CHAR FUNCTION

Syntax:

TO_CHAR (value , format_mask)

- value : A number or date that will be converted to a string.
- format_mask : This is the format that will be used to convert value to string

TO_CHAR FUNCTION

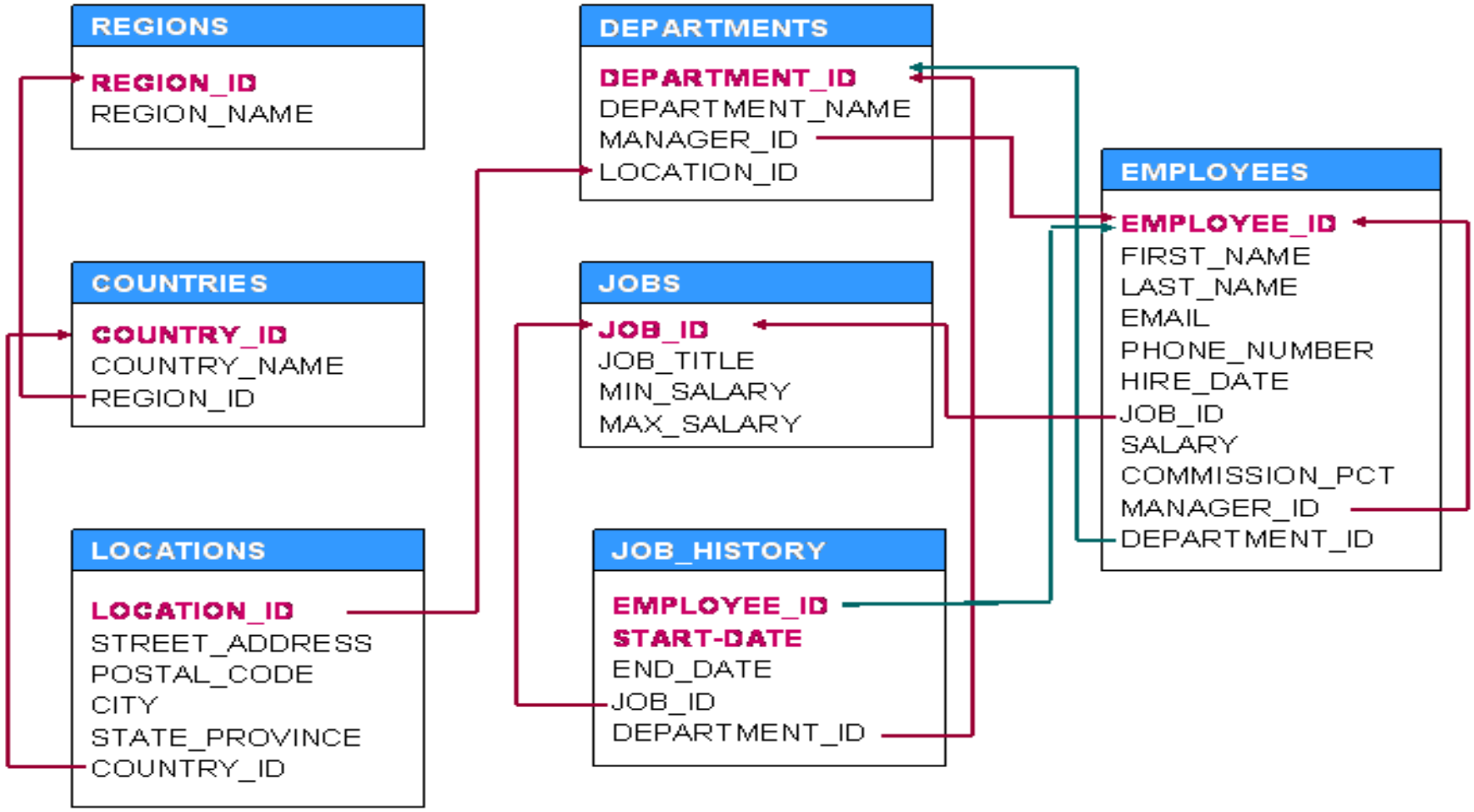
Example	Result
TO_CHAR (33.444, '99.9‘)	33.4
TO_CHAR (33.444, '$99.9‘)	$33.4
TO_CHAR (sysdate,'Day')	Monday
TO_CHAR (sysdate,'DD')	02
TO_CHAR (sysdate,‘YYYY')	2016
TO_CHAR (sysdate,‘YY')	16
TO_CHAR (sysdate,‘MM')	10

TO_CHAR FUNCTION Example

```
SELECT TO_CHAR   ( 33.444, '99.9'  ) FROM DUAL;
```

```
SELECT FIRST_NAME, HIRE_DATE, TO_CHAR (HIRE_DATE,’YYYY’)
FROM EMPLOYEES;
```

HR_Schema Tables



Note: Columns in RED color indicate primary key(s).

Insert a row into departments table that department ID is 280, department name is Sports, manager ID is 120 and location ID 1200.

```
INSERT INTO DEPARTMENTS VALUES
(280,'Sports',120,1200);
```

Change the ID of “Sports” department to 300 .

```
UPDATE DEPARTMENTS
SET DEPARTMENT_ID =300
WHERE DEPARTMENT_NAME ='Sports‘;
```

Delete “Sports” department from department table.

```
DELETE FROM DEPARTMENTS
WHERE DEPARTMENT_NAME ='Sports‘;
```

Display details of jobs.

```
SELECT *
FROM JOBS;
```

Display details of jobs where the minimum salary is greater than 10000.

```
SELECT *
FROM JOBS
WHERE MIN_SALARY > 10000;
```

Display details of jobs in the descending order of the title.

```
SELECT *
FROM JOBS
ORDER BY JOB_TITLE DESC;
```

Display department IDs and Department Names.

```
SELECT DEPARTMENT_ID, DEPARTMENT_NAME
FROM DEPARTMENTS;
```

Display EMPLOYEE_ID, salary, commission percentage, and salary after add 25% of salary for all employees.

```
SELECT  EMPLOYEE_ID, SALARY, COMMISSION_PCT,
SALARY+SALARY*0.25 FROM EMPLOYEES;
```

Or :

```
SELECT  EMPLOYEE_ID, SALARY, COMMISSION_PCT,
SALARY*1.25 FROM EMPLOYEES;
```

Display the first name and hire date of the employees who earned salary between 2500 and 4000.

```
SELECT FIRST_NAME, HIRE_DATE
FROM EMPLOYEES
WHERE SALARY BETWEEN 2500 AND 4000;
```

Display the first name and hire date of the employees who earned salary between 2500 and 4000, in the ascending order of HIRE_DATE.

```
SELECT FIRST_NAME, HIRE_DATE
FROM EMPLOYEES
WHERE SALARY BETWEEN 2500 AND 4000
ORDER BY HIRE_DATE;
```

Display the first name and hire date of the employees who earned salary between 2500 and 4000, in the descending order of HIRE_DATE.

```
SELECT FIRST_NAME, HIRE_DATE
FROM EMPLOYEES
WHERE SALARY BETWEEN 2500 AND 4000
ORDER BY HIRE_DATE DESC;
```

Display the first name and hire year of the employees

```
SELECT FIRST_NAME, TO_CHAR (HIRE_DATE,'YYYY')
JOIN_YEAR FROM EMPLOYEES;
```

Display the first name and hire date of the employees who hire year between 1997 and 1999 ordered by hire date.

```
SELECT FIRST_NAME, HIRE_DATE FROM EMPLOYEES
WHERE TO_CHAR(HIRE_DATE, 'YYYY') BETWEEN 1997
AND 1999
ORDER BY HIRE_DATE;
```