

تعلیم

اور اکل

ORACLE®

ORACLE

: SQL :

SQL

:sql (

SQL

:

SQL

(Database Query Language) - Structured Query Language

Oracle

SQL

:SQL (

(Retrieval Language Data)- DRL .

(Language Data Definition)- DDL .

(Data Manipulation Language)- (DML .

(Data Control Language)- DCL .

SQL ORACLE SQL

:SQL (

SQL

SQL ORACLE

SQL

-:

SQL

SQL SQL -

-:

**SELECT [DISTINCT] { * , column [alias]..... }
From table ;**

-:

Select -
[DISTINCT] -
[]

{ *, column [alias],...} -

table FROM -

. SQL -

-:

SQL

SQL

SQL

.
.
.

-:

: (

SQL> SELECT * FROM dept;

dept *

: (

SQL> SELECT deptno, loc FROM dept;

Select

From

()

-:

()

. Uppercase

: SELECT

*

....

:

Select * From emp ;

Select ename , job , age , city From emp ;

Select ename , age From emp Where job =
'Manager' ;

Select ename , age , job , city From emp where city = ' Cairo' and job = 'Manager' ;

where From select

Select ename,job From emp where age = ' ' ;

From Select

select emp.ename , emp.job , dept.loc From emp , dept where emp.deptno = dept.deptno

Elias

Select e.ename , e.job , d.deptno from emp e ,dept d
where e.deptno = d.deptno ;

select ename , job , city From emp where sal =
(select max(sal) from emp) ;

select ename , job , city , max(sal) From emp;

select ()

(Select ()

(Select ())

:
—

```
Select ename , sal , job From emp Where deptno  
=(Select deptno from emp where City=(select City  
From emp Where City = 'Cairo'));
```

:
—

```
Select ename , job ,sal From emp Where Sal =  
(Select max(sal) from emp where job = 'salesman');
```

Having & Group By

:
—

```
select deptno , Avg(age) From emp Group by  
deptno;
```

:
—

```
select deptno, Avg(age) from emp where city =  
'Cairo' Group by deptno ;
```

Select job , Avg(sal) from emp Group By job Having Avg(sal) > _____ ;

: Union

Select ename ,sal,job,septno from emp where Sal in(Select sal from emp where ename = 'Mohammed' or ename = 'Khalid');

:

In ()

Select ename ,sal,job,septno from emp where Sal in (select sal from emp where ename = 'Mohammed' Union select sal from emp where ename = 'Khalid');

: DML

: SQL

(DML) Data Manipulation Language

:

Insert (

:

;

Insert Into () values();

;

**Insert into emp (ename, job , city , age , deptno)
Values ('Mohammed','Manager','Riyadh', ,);**

;

**Insert into emp (ename,job,city,age,deptno) Select
ename,job,city,age,deptno from emp where ename
= 'Mohammed';**

:

Insert Into City(city) Select city from emp;

: Update (

:

Update Set ();

:

Update emp Set city = 'Cairo' where dept = ;

:

Update emp Set sal = (sal *)/ ;

:

**Update emp Set Comm = (select comm from emp
where ename = 'Mohammed');**

:Delete (

Delete From ;

Delete From emp;

Delete From emp Where ename = 'Mohammed';

Delete From emp Where Comm = (Select comm
From emp Where sal =);

=

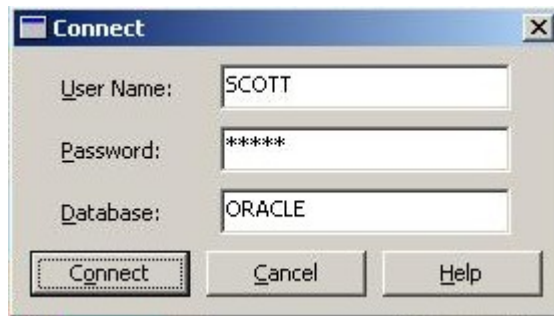
"

"

خطوات التشغيل :

:

PLUS SQL < ORACLE for Windows > SQL PLUS



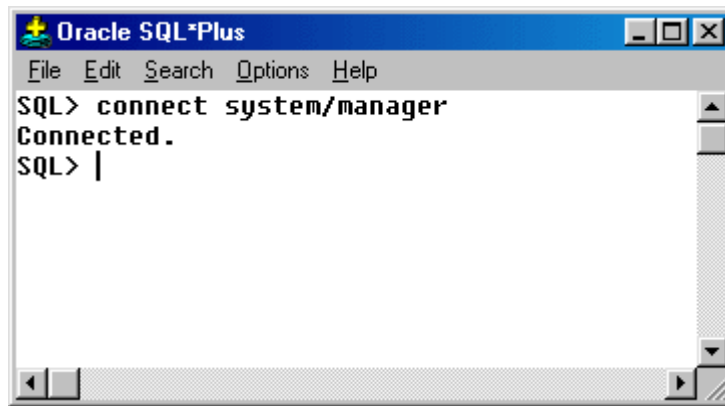
:

system :

manager :

scott

tiger



File	
Open	
Save	
.....	
Create	
.....	
Replace	
.....	
Append	
Save As	
Spool	
..... Spool	
File	
..... Spool	
Off	
Run	
Cancel	
Exit	
Edit	
Copy	
Paste	
Clear	
Editor	
.....	
Invoke Editor	
.....	
Define Editor	

Search	
Find	
Find Next	
Options	
Environment	

SQL *

SQL

-:

الوصف	العمليات
جمع	+
طرح	-
ضرب	=
قسمة	/

Calculated Fields

-: -

:-

SQL> SELECT ename, sal, sal+

FROM emp ;

-: _____

: SQL .
(- -)

.

.

:

SQL> SELECT ename, sal, *sal+
FROM emp ;

-:

SQL> SELECT ename, sal, *(sal+)
FROM emp ;

.

: *Null Values*

Null Values

:-

**SQL> SELECT ename, job, comm
FROM emp ;**

:-

ENAME	JOB	COMM
-----	-----	-----
KING	PRESIDENT	
BLAKE	MANAGER	
TURNER	SALESMAN	

:-

Null Values

:-

**SQL> select ename , sal+comm
from emp;**

Defining a Column Alias

Column Alias

..

AS

Column Alias

```
SQL> SELECT ename AS name, sal salary  
FROM emp ;
```

NAME SALARY

AS

```
"SELECT ename "Name <SQL  
sal* "Annual Salary"  
FROM emp;
```

Name Annual Salary

."

:-

(| |)

Select

SQL> SELECT ename || job AS "Employees"
FROM emp;

Employees

KINGPRESIDENT
BLAKEMANAGER
CLARKMANAGER
JONESMANAGER
MARTINSALESMAN

(| |)

: SQL -

SQL

: SQL

: SQL

EMPNO ENAME JOB ... DEPTNO
KING PRESIDENT
BLAKE MANAGER
CLARK MANAGER
JONES MANAGER

-:

SQL

SELECT [DISTINCT] { *, *column [alias], ...* }
FROM table
[WHERE condition(s)];

-: SQL

Select -

From -

Where -

-: SQL

SQL> SELECT ename, job, deptno

FROM emp

WHERE job='CLERK';

ENAME JOB DEPTNO

JAMES CLERK

SMITH CLERK

CLERK

'CLERK '

Small

' '

-:

المعنى	المعامل المستخدم
المتساوي	=
أكبر من	>
أكبر من أو يساوي	>=
أقل من أو يساوي	<=
أقل من	<
لا يساوي	<>

```
SQL> SELECT ename, sal, comm
      FROM emp
      WHERE comm.=>sal ;
```

-:

المعامل	المعنى
BETWEEN ...AND...	Between two values (inclusive)
IN(list)	Match any of a list of values
LIKE	Match a character pattern
IS NULL	Is a null value

-:

-:

```
SQL> SELECT ename, sal
        FROM emp
        WHERE sal BETWEEN      AND ;
```

-:

```
ENAME      SAL
```

```
MARTIN
```

```
TURNER
```

```
WARD
```

```
ADAMS
```

```
MILLER
```

-:

```
( And .. Between ) .
```

```
Between .
```

```
And .
```

.

```
SQL> SELECT empno, ename, sal, mgr
```

```
FROM emp
```

```
WHERE mgr IN ( , , );
```

```
EMPNO      ENAME      SAL      MGR
```

```
-----
```

```
FORD
```

```
SMITH
```

```
SCOTT
```

```
ADAMS
```

```
IN
```

```
In
```

```
..
```

```
SQL> SELECT ename
```

```
FROM emp
```

```
WHERE ename LIKE '_A%';
```

```
ENAME
```

```
-----
```

```
JAMES
```

```
WARD
```

-:

%

-

-:

```
SQL> SELECT ename, mgr
        FROM emp
        WHERE mgr IS NULL;
```

-:

```
ENAME      MGR
```

```
-----
```

```
KING
```

-:

-:

المعنى

Returns TRUE if *both* component conditions are TRUE

Returns TRUE if *either* component condition is TRUE

Returns TRUE if the following condition is FALSE

المعامل

AND

OR

NOT

-:

-:

```
SQL> SELECT empno, ename, job, sal
       FROM emp
       WHERE sal >=
       AND job='CLERK';
```

-:

EMPNO	ENAME	JOB	SAL
	ADAMS	CLERK	
	MILLER	CLERK	

-:

And

.

.

.

-:

```
SQL> SELECT empno, ename, job, sal
        FROM emp
        WHERE sal >=
        OR job='CLERK';
```

-:

```
EMPNO ENAME JOB SAL
```

```
KING PRESIDENT
```

```
BLAKE MANAGER
```

```
CLARK MANAGER
```

```
JONES MANAGER
```

```
MARTIN SALESMAN
```

-:

OR -

-

OR -

AND

:

```
SQL> SELECT ename, job
FROM emp
WHERE job NOT IN
('CLERK','MANAGER','ANALYST');
```

ENAME JOB

KING PRESIDENT

MARTIN SALESMAN

ALLEN SALESMAN

TURNER SALESMAN

WARD SALESMAN

-:

NOT

-

NOT

NOT

-

⋮ *

Oracle

-:

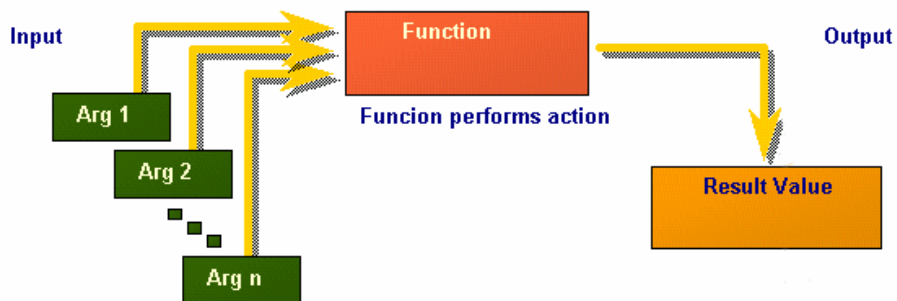
Single Row Function

.

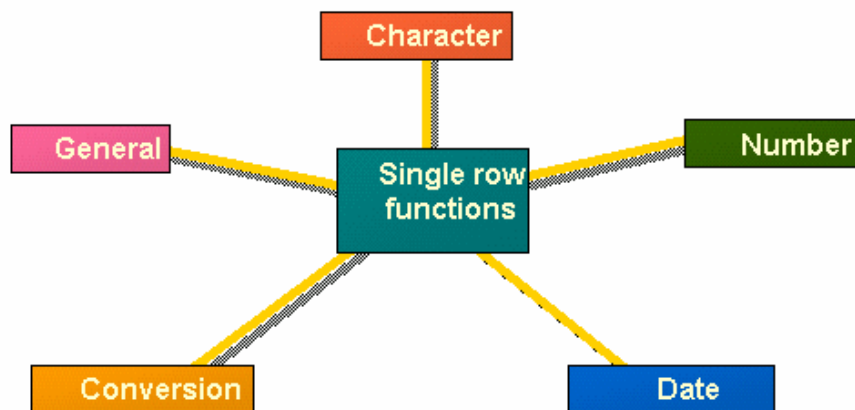
Multiple Row Function

.

-:



!Error



-:

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.

.

.

.

.

.

:

*

-:

-:

functions Character manipulation

-

CONCAT •

SUBSTR •

LENGTH •

INSTR •

LPAD •

TRIM •

Case conversion functions

-

LOWER •

UPPER •

INITCAP •

-:

-: (

LOWER') SQL Course') UPPER')SQL Course') INITCAP')SQL Course')	sql course SQL COURSE Sql Course

Small
Capital

Small

LOWER

UPPER

INITCAP

Capital

-:

```
SQL> SELECT empno, ename,
deptno
      FROM emp
      WHERE ename = 'blake';
'blake'
```

-:

no rows selected

.

```
SQL> SELECT empno, ename, deptno
      FROM emp
      WHERE ename = PPER('blake');
```

:

EMPNO	ENAME	DEPTNO
-----	-----	-----
	BLAKE	

.UPPER

-: (

Function	Results
('Good','string'),concat	Good string
('string', ,)substr	str
('string','r'),instr	
('string'),length	
(sal, , '*'),lpad	Mith

:

: CONCAT (

: SUBSTR (

: LENGTH (

: INSTR (

: LPAD (

: _____

SQL> SELECT ename, CONCAT (ename, job),
LENGTH (ename),
INSTR(ename, 'A')
FROM emp
WHERE SUBSTR(job,) = 'SALES';

ENAME CONCAT(ENAME,JOB) LENGTH(ENAME)
INSTR(ENAME,'A')

MARTIN	MARTINSALESMAN
ALLEN	ALLENSALESMAN
TURNER	TURNERSALESMAN
WARD	WARDSALESMAN

.

: _____ (

ROUND:

ROUND (, ,) = ,

TRUNC:

TRUNC (, ,) = ,

MOD:

MOD (,) =

: _____ *

**SQL> SELECT ROUND(,), ROUND(,),
ROUND(, , -)
FROM DUAL;**

ROUND(,)ROUND(,)ROUND(, , -)

,

```

SQL> SELECT TRUNC( , ), TRUNC( , ),
           TRUNC( , , - )
           FROM DUAL;

```

```

           TRUNC( , )TRUNC( , )TRUNC( , , - )
-----
,

```

```

SQL> SELECT  ename, sal, comm, MOD(sal, comm)
           FROM emp
           WHERE job = 'SALESMAN';

```

```

ENAME  SAL  COMM  MOD(SAL,COMM)
-----
MARTIN
ALLEN
TURNER
WARD

```