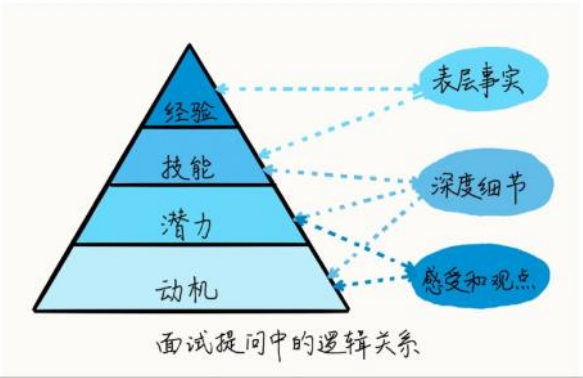
2019.10.17

17 October 2019 08:29

Oracle Day 02 「NOTE」

「面试

什么情况下，面试官会判定一个应聘者面试失败呢？有两种情况：一、发现他不适合；二、不清楚他是否适合。也许，你会觉得第二种情况有点不通情理，“如果一次面试没搞清楚人家的能力，难道不该 再安排一场吗？这样难道不是面试官的问题吗？”其实不然。有些被拒绝的应聘者，其实并 没有被发现致命的缺点，只是没有被发现突出的优点而已。当然，不够资深的面试官，采用的面试方法和问题可能不够恰当，导致看不清应聘者的能 力，但他的补救方法通常是把精力转到下一个候选人身上，除非没有其他候选人了。」



面试提问中的逻辑关系

Oracle Lesson 3

「1. Review .....」

SQL *PLUS

别名有空格、大小写敏感、用 双引

单行函数

我也是简单记一下 (>Д<)

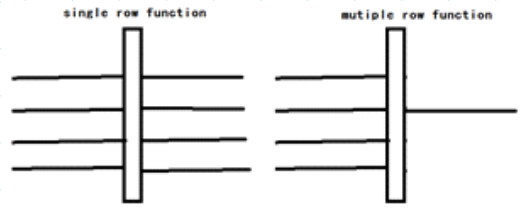
☆ nvl(a, b) when a is null, replace a with b

☆ You can also use PL/SQL to define your own function.

☆ single line (row) function & multiple lines (rows) function:

☆ You can also use PL/SQL to define your own function.

☆ sigle line (row) function & multiple lines (rows) function.



单行函数 — Character
Number
Date
Conversion
Category

— Charactor

→ LOWER ("SQL Course")
全部小写.

→ UPPER ( ) 全部大写

→ INITCAP ( ) 首字母大写

Lower:

```
select lower(last_name)
from s_emp
```

velasquez
ngao
nagayama
quick-to-see
ropeburn
urguhart
menchu
biri
catchpole
havel
magee
giljum
sedeghi
nguyen
dumas
maduro
smith
nozaki
patel
newman
markarian
chang
patel
dancs
schwartz

Download CSV
25 rows selected.

Upper( ):

Download CSV
25 rows selected.

upper():

```
select upper(last_name)
from s_emp
```

UPPER(LAST_NAME)
VELASQUEZ
NGAO
NAGAYAMA
QUICK-TO-SEE
ROPEBURN
URGUHART
MENCHU
BIRI
CATCHPOLE
HAVEL
MAGEE

```
select *
from s_emp
where lower(last_name)='smith'
```

ID	LAST_NAME	FIRST_NAME	USERID	START_DATE	COMMENTS	MANAGER_ID	TITLE	DEPT_ID	SALARY	COMMISSION_PCT
17	Smith	George	gsmith	08-MAR-90	-	6	Stock Clerk	41	940	-

Download CSV

→ CONCAT ('str1', 'str2')
= Str1str2

→ SUBSTRING ('String', 1, 3)
= 'Str'

→ LENGTH ('str')
= 6

```
select substr(last_name,1,2)
from s_emp
```
前两字

```
select substr(last_name,length(last_name)-1,2)
from s_emp
```
后两字.

SUBSTR(LAST_NAME,LENGTH(LAST_NAME)-1,2)
ez
ao
ma
ee
rn
rt
hu
ri
le
el
ee

Well done

Well done

- Number
  - -> ROUND 四舍五入
  - -> TRUNC 截断
  - -> MOD 取余

ROUND(~~50~~, -1) , 小数点向左移1位
然后四舍五入：

eg. 45.923
↓
ROUND(45.923, -1)
↓
4.5923
↓
5.0
↓
5 ANS 为 50

ROUND(45.923, 2)
↓
45.92

```
select round(45.923,-2)
from dual
```

ROUND(45.923,-2)
0

Download CSV

TRUNC(45.923, 2) → 45.92
TRUNC(45.923) → 45
TRUNC(45.923, -1) → 40

MOD(16, 3) → 1

- DATE

将年月日秒全部存储，

默认显示 DD-MON-YY

```
select id, last_name||''||first_name name,start_date
from s_emp
```

ID	NAME	START_DATE
1	Velasquez Carmen	03-MAR-90
2	Ngao LaDoris	08-MAR-90
3	Nagayama Midori	17-JUN-91
4	Quick-To-See Mark	07-APR-90
5	Ropeburn Audry	04-MAR-90
6	Urguhart Molly	18-JAN-91
7	Menchu Roberta	14-MAY-90
8	Biri Ben	07-APR-90
9	Catchpole Antoinette	09-FEB-92
10	Havel Marta	27-FEB-91
11	Magee Colin	14-MAY-90
12	Giljum Henry	18-JAN-92
13	Sedeghi Yasmin	18-FEB-91
14	Nguyen Mai	22-JAN-92
15	Dumas Andre	09-OCT-91
16	Maduro Elena	07-FEB-92
17	Smith George	08-MAR-90
18	Nozaki Akira	09-FEB-91
19	Patel Vikram	06-AUG-91
20	Newman Chad	21-JUL-91
21	Markarian Alexander	26-MAY-91
22	Chang Eddie	30-NOV-90
23	Patel Radha	17-OCT-90

```
select sysdate
from dual
```

无参函数，伪列

Systimestamp

SYSDATE
17-OCT-19

Download CSV

```
select *
from dual
```

DUMMY
X

Download CSV

哑表

```
select rownum,last_name,salary
from s_emp
```

伪列

ROWNUM	LAST_NAME	SALARY
1	Velasquez	2500
2	Ngao	1450
3	Nagayama	1400
4	Quick-To-See	1450
5	Ropeburn	1550
6	Urguhart	1200
7	Menchu	1250
8	Biri	1100
9	Catchpole	1300
10	Havel	1307
11	Magee	1400
12	Giljum	1490

rownum 使用限制

1) <, <= 无限制

2) =, [redacted], >= 只对 1 有意义

3) between ... and ... > 无意义

ROWID

一行数据在底层的地址。

select rowid, rownum,last_name,salary
from s_emp

ROWID	ROWNUM	LAST_NAME	SALARY
ABWWpiAAPAAAAWVAAA	1	Velasquez	2500
ABWWpiAAPAAAAWVAAB	2	Ngao	1450
ABWWpiAAPAAAAWVAAC	3	Nagayama	1400
ABWWpiAAPAAAAWVAAD	4	Quick-To-See	1450
ABWWpiAAPAAAAWVAAE	5	Ropeburn	1550
ABWWpiAAPAAAAWVAAF	6	Urguhart	1200
ABWWpiAAPAAAAWVAAG	7	Menchu	1250
ABWWpiAAPAAAAWVAAH	8	Biri	1100
ABWWpiAAPAAAAWVAAI	9	Catchpole	1300
ABWWpiAAPAAAAWVAAJ	10	Havel	1307
ABWWpiAAPAAAAWVAAK	11	Magee	1400
ABWWpiAAPAAAAWVAAL	12	Giljum	1490

对日期类型进行加/减运算。

select sysdate+100
from dual

SYSDATE+100
25-JAN-20

Download CSV

select sysdate-100
from dual

SYSDATE-100
09-JUL-19

Download CSV

select sysdate+1/24
from dual

加一小时

select start_date ,sysdate-start_date as days
from s_emp

START_DATE	DAYS
03-MAR-90	-25705.252847222222222222222222222222
08-MAR-90	10815.101319444444444444444444444444444
17-JUN-91	10349.101319444444444444444444444444444
07-APR-90	10785.101319444444444444444444444444444
04-MAR-90	10819.101319444444444444444444444444444
18-JAN-91	10499.101319444444444444444444444444444
14-MAY-90	10748.101319444444444444444444444444444
07-APR-90	10785.101319444444444444444444444444444

→ MONTHS_BETWEEN ('01-SEP-95', '11-JAN-94')

→ ADD_MONTHS('11-JAN-94', 5)

→ NEXT_DAY('01-SEP-95', 'FRIDAY')
这天的下一个 这个

→ LAST_DAY('01-SEP-95')
这天的这月的最后一天

一三五七十腊

```
select round(to_date('16-MAY-95', 'DD-MON-YY'),'MONTH')
from dual
```

ROUND(TO_DATE('16-MAY-95', 'DD-MON-YY'),'MONTH')
01-JUN-95

Download CSV

MONTH, 四天进位, 16进1

Year, 四月进位, 7进1

Youth

TRUNC 仅有舍位, 也对日期操作.
等一反三 desc

Conversion 相关函数

→ TO_CHAR (date, 'fmt')

```
select sysdate, to_char(sysdate, 'yyyy-mm-dd hh:mi:ss')
from dual
```

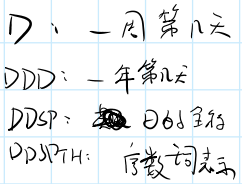
SYSDATE	TO_CHAR(SYSDATE,'YYYY-MM-DDHH:MI:SS')
17-OCT-19	2019-10-17 03:12:10

Download CSV

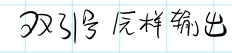
```
select sysdate, to_char(sysdate, 'yyyy-mm-dd hh24:mi:ss')
from dual
```

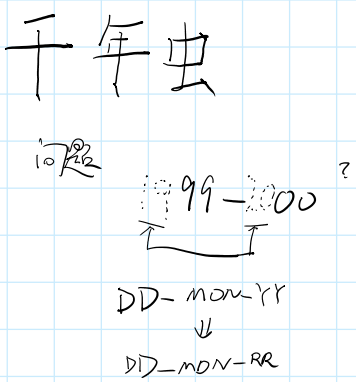
SYSDATE	TO_CHAR(SYSDATE,'YYYY-MM-DDHH24:MI:SS')
17-OCT-19	2019-10-17 03:12:35

Download CSV




```
select sysdate, to_char(sysdate, 'yyyy-mm-dd "YY-MM-DD"')
from dual
```






```
select to_char(to_date('16-MAY-95',  'DD-MON-YY'), 'yyyy-mm-dd "YY-MM-DD"'), to_char(to_date('16-
MAY-95',  'DD-MON-RR'), 'yyyy-mm-dd "YY-MM-DD"')
from dual
```

TO_CHAR(TO_DATE('16-MAY-95', 'DD-MON-YY'),'YYYY-MM-DD"YY-MM-DD"')	TO_CHAR(TO_DATE('16-MAY-95', 'DD-MON-RR'),'YYYY-MM-DD"YY-MM-DD"')
2095-05-16 YY-MM-DD	1995-05-16 YY-MM-DD

Download CSV

```
select to_char(sysdate, 'fmyyyy-mm-dd "YY-MM-DD"')
from dual
```

TO_CHAR(SYSDATE,'FMYYYY-MM-DD"YY-MM-DD"')
2019-10-17 YY-MM-DD

Download CSV

```
select to_char(to_date('16-MAY-95',  'DD-MON-YY'), 'fmyyyy-mm-dd "YY-MM-DD"')
from dual
```

把前面的0去掉.

TO_CHAR(TO_DATE('16-MAY-95', 'DD-MON-YY'),'FMYYYY-MM-DD"YY-MM-DD"')
2095-5-16 YY-MM-DD

Download CSV

TO_CHAR(number, 'fmt')

```
select last_name, salary, to_char(salary,'999,999.99')
from s_emp
```

LAST_NAME	SALARY	TO_CHAR(SALARY,'999,999.99')
Velasquez	2500	2,500.00
Ngao	1450	1,450.00
Nagayama	1400	1,400.00
Quick-To-See	1450	1,450.00
Ropeburn	1550	1,550.00
Urguhart	1200	1,200.00
Menchu	1250	1,250.00
Biri	1100	1,100.00
Catchpole	1300	1,300.00

```
select last_name, salary, to_char(salary,'$999,999,999.99')
from s_emp
```

LAST_NAME	SALARY	TO_CHAR(SALARY,'$999,999,999.99')
Velasquez	2500	$2,500.00
Ngao	1450	$1,450.00
Nagayama	1400	$1,400.00
Quick-To-See	1450	$1,450.00
Ropeburn	1550	$1,550.00
Urguhart	1200	$1,200.00
Menchu	1250	$1,250.00
Biri	1100	$1,100.00
Catchpole	1300	$1,300.00

```
select last_name, salary, to_char(salary,'L999,999,999.99')
from s_emp
```

L表示本地货币符号

LAST_NAME	SALARY	TO_CHAR(SALARY,'L999,999,999.99')
Velasquez	2500	$2,500.00
Ngao	1450	$1,450.00
Nagayama	1400	$1,400.00
Quick-To-See	1450	$1,450.00
Ropeburn	1550	$1,550.00

TO_NUMBER(char) ...

```
select to_number('100')
from dual
```

TO_NUMBER('100')
100

Download CSV

TO_DATE(date,'fmt')

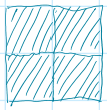
Wordpress

XML Oracle JDBC
HTML CSS JAVAScript
JQuery AJAX ???

函数嵌套 Servlet、JSP、

@ @ROYIANS

Lession 4 多表查询



笛卡尔乘积现象

```
select s_emp.last_name, s_dept.name
from s_dept,s_emp
where s_dept.id = s_emp.dept_id
```

LAST_NAME	NAME
Velasquez	Administration
Ngao	Operations
Nagayama	Sales
Quick-To-See	Finance
Ropeburn	Administration
Urguhart	Operations
Menchu	Operations
Biri	Operations
Catchpole	Operations

n张表进行连接查询
为避免DKE笛积，至少给出
n-1条有效的连接条件。

Integrated Cloud

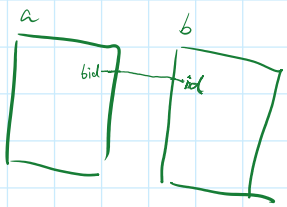
非等连接

等连接
自连接
外连接
内连接
...

连接时使用别名

```
select e.last_name, d.name
from s_dept d,s_emp e
where d.id = e.dept_id
```

Table



What is Outter ~~Connection~~ Join

左外连接：
A left outer join B

右外连接：
B right outer join A

全外连接：
× full Outer join ×

```
select e.last_name, d.name
from s_dept d right join s_emp e
on d.id = e.dept_id
```

Dancs	Operations
Schwartz	Operations
Velasquez	Administration
Ropeburn	Administration
ROYIANS	-

Download CSV
26 rows selected.

内连接

```
select e.last_name, d.name
from s_dept d inner join s_emp e
on d.id = e.dept_id
```

「12:16」

上课
Go语言
算法 & 数据结构
JAVA深度...

Oracle 左外 特殊写法 左(+)右
右外 右(+)左

(+) 加在没有数据那一方

```
select e.last_name, d.name
from s_dept d , s_emp e
where d.id(+) = e.dept_id
```

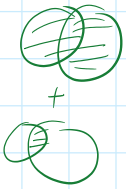
右外.

全外无特有写法，可用 UNION 将左右外合一下

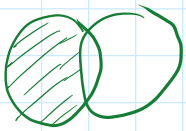
一 UNION 并集

A Union B 两集合并集

A Union all B 两集合并集，不merge去重。



minus



intersect

zxc