####ﾒﾊｿﾓﾎｱ・

declare

flag char :='u';

begin

update dvds

set dname ='888'

where id=100;

if SQL%NOTFOUND then

flag:='z';

insert into dvds(dname,dcount)values('uuuu',8);

end if;

if flag ='u' then

dbms\_output.put\_line('1');

else

dbms\_output.put\_line('0');

end if;

end;

###ﾏﾔﾊｾﾓﾎｱ・ｻｴﾎﾊ

declare

cursor mycur is select \* from dvds order by id;

myreco dvds%rowtype;

begin

open mycur;

fetch mycur into myreco;

while mycur%found loop

dbms\_output.put\_line(myreco.dname || ' ' || myreco.dcount);

end loop;

close mycur;

end;

###ﾏﾔﾊｾﾓﾎｱ・ﾎﾊ

declare

cursor mycur(myjob varchar2) is

select \* from emp where job = myjob;

begin

for i in mycur('salesman') loop

dbms\_output.put\_line(i.ename);

end loop;

end;

/

### ﾏﾔﾊｾﾓﾎｱ・ｴﾎﾊ｣ｬﾌ豢﨑菽ｿ

declare

dept\_no emp.deptno%type;

emp\_no emp.empno%type;

emp\_name emp.ename%type;

cursor emp\_cur(deptparam number) is

select empno,ename from emp where deptno =deptparam;

begin

dept\_no:=&ｲｿﾃﾅｱ犲ﾅ;

open emp\_cur(edpt\_no);

loop

fetch emp\_cur into emp\_no,emp\_name;

exit when emp\_cur%notfound;

dbms\_output.put\_line(emp\_no || ' ' || emp\_name);

end loop;

close emp\_cur;

end;

/

###ﾏﾔﾊｾﾓﾎｱ・ｸ・ﾂﾐﾐｻｾｳ

declare

cursor mycur(dept\_no integer) is

select \* from dept

where deptno >dept\_no for update ｿﾉﾒﾔﾌ晴ﾓ (of ﾁﾐﾃ訒ｩ;//ｱﾘﾐ・ﾓ｣ｨ for update｣ｩ

begin

for index in mycur(50) loop

delete from dept

where current of mycur; //ﾓﾎｱ・ｱﾇｰﾐﾐ

end loop;

end;

/

####ﾑｭｻｷﾇｶﾌﾗﾓﾎｱ・

declare

cursor c\_dept is

select deptno,dname,from dept order by deptno;

cursor c\_emp(p\_dept varchar2) is

select ename ,sal from emp where deptno =p\_dept ;

v\_salary emp.sal%type;

begin

for r\_dept in c\_dept loop

dbms\_output.put\_line('department' || r\_dept.deptno ||' '||r\_dept.dname);

v\_salary:=0;

for r\_emp in c\_emp(r\_dept.deptno) loop

dbms\_output.put\_line('name:' || r\_emp.ename || 'salary:'|| r\_emp.sal);

v\_salary:=v\_salary+ emp.sal;

end loop;

dbms\_output.put\_line('total:'|| v\_salary);

end loop;

end;

/

########## REF ﾓﾎｱ・ｶｯﾌｬﾓﾎｱ・

type mycur is ref cursor

[return stud\_dep%rowtype;]

s\_cursor mycur;

declare

type cursor\_type is ref cursor;

stu\_cur cursor\_type;

v\_stu user%rowtype;

begin

open stu\_cur for

select \* form user where sex ='male';

loop

fetch stu\_cur into v\_stu;

exit when stu\_cur%notfound;

dbms\_output.put\_line(v\_stu.num || ''|| v\_stu.name || v\_stu.sex || v\_stu.age);

end loop;

close stu\_cur;

end;

/

#### ref ﾓﾎｱ・

declare

type empcurtyp is ref cursor;

type idlist is table of emp.empno%type //ｼｯｺﾏ

type namelist is table of emp.ename%type;

type sallist is table of emp.sal%type;

emp\_cv empcurtyp;

ids idlist;

names namelist;

sals salist

row\_cn number;

begin

open emp\_cv for select empno,ename,sal from emp;

fetch emp\_cv bluk collect into ids,names,sals;

close emp\_cv;

for i in ids.first .. ids.last loop

dbms\_output.put\_line(ids(i) ' '||names(i) ||' '|| sals(i));

end loop;

end;

/

####ﾐﾐｼｶﾋ・

select \* from emp where empno =7654 for update[of colmns,colmns,colmns];// for update ｼﾓﾋ・

#####ｱ晴ｶﾋ・

lock table table\_name in mode MODE;

//ｹｲﾏ棏・

lock table emp in share mode;//ﾆ萢﨧ﾃｻｧｿﾉﾒﾔｵﾄｲ鰉ｯempｱ昉ﾄﾊｾﾝ,ｲｻﾄﾜﾐﾞｸﾄﾉｾｳｲ衒・

######function

create or replace function fun\_hello

return varchar2

is

begin

return 'hello firend'||to\_char(sysdate,'DAY');

end;

/

create or replace function fun\_is\_first\_day

return number

is

v\_result number:=0;

v\_day varchar2(2);

begin

select to\_char(sysdate,'dd')into v\_day from dual;

if v\_day ='01' them

v\_result:=1;

else

v\_result :=0;

end if;

return (v\_reuslt｣ｩ;

end;

/

//ﾇﾖｽﾚｳ､ｶﾈｺｯﾊ

create or replace function getstringlen(str in varchar2)

return integer

is

result integer;

i number;

begin

result :=0;

if length(str)=0 then

return (reuslt);

end if;

for i in 1..length(str) loop

if ascii(substr(str,i,1) <256 then//ｲｻﾊﾇｺｺﾗﾖ

result :=result +1;

else

result : result +2;

end if;

end loop;

return(result);

end;

/

create or replace function find\_deptname

(emp\_no number)

return varchar2

as

dept\_no number(2);

result dept.dname%type;

begin

select deptno into dept\_no from emp

where empno = emp\_no;

select dname into result from dept

where deptno =dept\_no;

return result;

exception

when others then

return null;

end;

/

create or replace function sal\_fun

(salary number)

return varchar2

as

max\_sal number;

min\_sal number;

begin

select max(sal),min(sal) into max\_sal,min\_sal from emp;

if salary >= max\_sal and salary <=min\_sal then

return 'ﾊ菠・ﾄｹ､ﾗﾊﾊﾇﾗ鋕ﾟﾊﾇﾗ鋙ﾍｹ､ﾗﾊﾖｮｼ・;

else

return 'ｳｬｳｶﾎｧ';

end if;

end;

/

////ｵﾃｺｯﾊ

declare

sal number:= 1500;

msg varchar2(200);

begin

msg:=sal\_fun(sal);

dbms\_output.put\_line(msg);

end;

/

####

select sal\_fun(1500) from dual;

####

create or replace function work\_day

(emp\_num varchar2)

return number

as

v\_days number;

v\_sal number;

begin

select workdays,salary into v\_days,v\_sal from salary

where emp\_num =empno;

v\_days:=22-v\_days;

if v\_days >0 then

v\_sal:=v\_sal - v\_days\*50;

end if;

if v\_sal <0 then

v\_sal :=0;

end if;

return v\_sal;

end;

/

create or replace function cursor\_getdata

(n integer:=0)

return integer

is

n\_result integer:0;

emp\_no emp.empno%type;

emp\_name emp.ename%type;

emp\_sal emp.sal%type;

cursor cur\_emp is select empno,ename,sal from emp;

begin

case

when (n=0) then

open cur\_emp;

loop

fetch cur\_emp into emp\_no ,emp\_name,emp\_sal;

exit when cur\_emp%notfound;

n\_reuslt:= n\_reuslt+1;

end loop;

else

goto exit0;

end case;

<<exit0>>

if cur\_emp%isopen then

close cur\_emp;

end if;

return n\_result;

end;

/

#############ｰ・

create or replace package sales\_report

as

cursor salsecur return emp;

end;

/

create or replace package body sales\_report

as

cursor salescur return emp

is

select \* from emp;

end;

/

//ｵﾃｰ・

declare ename emp%rowtype;

begin

open sales\_report.salsecur

loop

fetch sales\_report.salsecur into ename;

exit when sales\_report.salescur%notfound;

if ename.sal>3000 then

dbms\_output.put\_line(ename.ename ||':ﾄ羞ﾄｹ､ﾗﾊｻｹｿﾉﾒﾔ');

elseif ename.sal <=3000 then

dbms\_output.put\_line(enname.ename || 'ﾄ羞ﾄｹ､ﾗﾊﾓﾐｵ羞ﾍ');

end if;

end loop

close sales\_report.salsecur;

end;

/

##package

create or replace package emp\_data

as

type emprecetyp is record(emp\_id number(5),

emp\_name varchar2(10),

job\_title varchar2(9),

dept\_name varchar2(14),

dept\_loc varchar2(13);

type empcurtyp is ref cursor return emprectyp;

procedure get\_staff( dept\_no number,

emp\_cv in out empcurtyp);

end;

/

create or replace package body emp\_data

as

procedure get\_staff

(dept\_no in number,emp\_cv in out empcurtyp)

is

begin

open emp\_cv for select empno,ename,job,dname,loc from emp,dept

where emp.deptno =dept\_no and emp.deptno =dept.deptno

end;

end;

/

///ｵﾃｰ・

var cv ref cursor

exec emp\_data.get\_staff(20,:cv);

我?可以看到游?FOR循???很好的?化了游?的??，

我?不在需要open、fetch和close?句，不在需要用%FOUND属性??是否到最后一条??，

?一切Oracle?式的?我?完成了。

如果?想?除或者更新被Select For Update引用的??，?可以使用Where Current Of?句。

declare

cursor emp\_cur is

select \* from emp for update;

begin

for emp\_row in emp\_cur

loop

if emp\_row.job='manager'then

update emp set sal=sal+5000 where current of emp\_cur;

else

update emp set sal =sal+1000 where curren of emp\_cur;

end if;

end loop;

end;