```sql
--TP note Mehdi Nasri


--declare package
create or replace package TPnote
as
procedure InformationStockageTable(Usager in varchar, nomtable in varchar);
procedure InformationStockageIndex(Usager in varchar, nomtable in varchar);
procedure blocsCache(Usager in varchar, typeObjet in varchar);
end TPnote;
/

--body package
create or replace package body TPnote
as

procedure InformationStockageTable(Usager in varchar, nomtable in varchar)
as
cursor c is
select segment_name, segment_type, t.tablespace_name as tablespace_name, s.extents
as extents, s.blocks as blocks, num_rows, avg_row_len from dba_segments s,
user_tables t where t.table_name = s.segment_name and owner = Usager and
table_name = nomtable;
--Usager exception
begin
dbms_output.put_line('**************************************************');
dbms_output.put_line(rpad('nom Segment',25)||rpad('type Segment',20)||rpad('Espace
table',20)||rpad('Nbre extensions',20)||rpad('Nbre blocs alloues',20)||
rpad('Taille en Mo',20));
for c_t in c
loop
dbms_output.put_line(rpad(c_t.segment_name,25) || rpad(c_t.segment_type,20) ||
rpad(c_t.tablespace_name,20) || rpad(c_t.extents,20) || rpad(c_t.blocks,20) ||
rpad(round((c_t.num_rows*c_t.avg_row_len)/(1024*1024),2),20));
end loop;
dbms_output.put_line('**************************************************');
/*if (Usager or nomtable) is null then raise Usager;
end if;
exception
when Usager then dbms_output.put_line('Usager ou table inexistants');
when Usager then dbms_output.put_line('Error');*/
end;


procedure InformationStockageIndex(Usager in varchar, nomtable in varchar)
as
cursor c is
select segment_name, segment_type, s.tablespace_name as tablespace_name, s.extents
as extents, s.blocks as blocks, num_rows, leaf_blocks from dba_segments s,
user_indexes t where (t.table_name = s.segment_name or
t.index_name=s.segment_name) and s.owner =Usager and t.table_name = nomtable;
begin
for c_t in c
loop
dbms_output.put_line('**************************************************');
dbms_output.put_line(rpad('nom Segment',25)||rpad('type Segment',20)||rpad('Espace
table',20)||rpad('Nbre extensions',20)||rpad('Nbre blocs alloues',20)||
rpad('Taille en Mo',20));
dbms_output.put_line(rpad(c_t.segment_name,25) || rpad(c_t.segment_type,20) ||
rpad(c_t.tablespace_name,20) || rpad(c_t.extents,20) || rpad(c_t.blocks,20) ||
rpad(round((c_t.num_rows*c_t.leaf_blocks)/(1024*1024),2),20));
end loop;
dbms_output.put_line('**************************************************');
end;

procedure blocsCache(Usager in varchar, typeObjet in varchar)
```

```sql
as
cursor c is
select distinct o.object_name, o.object_type, b.block#, b.class#, b.status from
dba_objects o, v$bh b where owner = Usager and o.object_id = b.objd and
object_type = typeObjet;
begin
dbms_output.put_line('Example retour');
dbms_output.put_line(' ');
dbms_output.put_line(' ');
for c_t in c
loop
dbms_output.put_line(rpad('nom objet',25)||rpad('type object',25)||rpad('numero
bloc',25)||rpad('classe',15)||rpad('statut',15));
dbms_output.put_line(rpad(c_t.object_name,25)||rpad(c_t.object_type,25)||
rpad(c_t.block#,25)||rpad(c_t.class#,15)||rpad(c_t.status,15));
dbms_output.put_line('*********************************************************');
end loop;
end;

end TPnote;
/

exec TPnote.InformationStockageTable('MNASRI', 'COMMUNE')
exec TPnote.InformationStockageIndex('MNASRI', 'COMMUNE')
exec TPnote.blocsCache('MNASRI', 'INDEX')


-------------------------------------------------------------------------------

create or replace procedure p1 (dep in integer, nomDep out varchar)
    is
     begin
    select nom into nomDep from dept where n_dept = dep;
     end;
     /

declare
name dept.nom%type;
begin
p1(10,name);
dbms_output.put_line('le nom est '||name);
end;
/

create or replace function f1 (dep in integer) return varchar
is
nomD dept.nom%type;
begin
 select nom into nomD from dept where n_dept = dep;
 return nomD;
end;
/

select f1(10) from dual;
-----------------------------------------------------------
create or replace package body Supervision
as

function tauxUtilisation return float
is
nbreUsagers integer;
nbreConnectes integer;
begin
select count(distinct username) into nbreConnectes from v$session where type
='USER';
select count(username) into nbreUsagers from dba_users;
return (nbreConnectes/nbreUsagers) * 100 ;
```

```sql
end ;

procedure infosUsagers
is
cursor c is select username, count(table_name) as nombreTables
from v$session, dba_tables where type ='USER'
and username = owner group by username;
begin
for c_t in c
loop
dbms_output.put_line(c_t.username||' a    '||c_t.nombreTables||' tables');
end loop;
end;

end Supervision ;
/

select Supervision.tauxUtilisation from dual;

declare
nomUsager varchar(20);
nombreTables   integer;
begin
Supervision.infosUsagers(nomUsager,nombreTables);
dbms_output.put_line('infos usagers connectes  '||nomUsager||' : '||nombreTables);
end;
/
-----------------------------------------------------------
--premiere cas (join)
select nom_com, nom_dep, nom_reg from commune c
    inner join departement d on c.dep = d.dep
        inner join region r on d.reg = r.reg
            where nom_reg in ('MIDI-PYRENEES', 'LANGUEDOC-ROUSSILLON', 'PROVENCE-
ALPES-COTE D''AZUR')
                and code_insee in(select codeLieu from monument where
typemonument='musee');

---deuxieme cas UNION

select nom_com, nom_dep, nom_reg from commune c, departement d, region r, monument
m
where c.dep=d.dep and d.reg=r.reg and c.code_insee = m.codeLieu and nom_reg='MIDI-
PYRENEES' and typemonument='musee'
union
select nom_com, nom_dep, nom_reg from commune c, departement d, region r, monument
m
where c.dep=d.dep and d.reg=r.reg and c.code_insee = m.codeLieu and
nom_reg='LANGUEDOC-ROUSSILLON' and typemonument='musee'
union
select nom_com, nom_dep, nom_reg from commune c, departement d, region r, monument
m
where c.dep=d.dep and d.reg=r.reg and c.code_insee = m.codeLieu and
nom_reg='PROVENCE-ALPES-COTE D''AZUR'and typemonument='musee';

---troisieme cas(Jointure)

select distinct nom_com, nom_dep, nom_reg from commune c, departement d, region r,
monument m
where c.dep=d.dep and d.reg=r.reg and c.code_insee = m.codeLieu and nom_reg
in ('MIDI-PYRENEES','PROVENCE-ALPES-COTE D''AZUR' ,'LANGUEDOC-ROUSSILLON')and
typemonument='musee';
```