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-- Tete TP1
create or replace package tpnotel
as
procedure StructureCommune;
procedure VueLibrairieRequetes;
end tpnotel;
/
-- Body TP1
create or replace package body tpnotel
as

procedure StructureCommune as
cursor c is select tablespace_name, num_rows, avg_space, blocks, empty_blocks,
avg_row_len from user_tables where table_name='COMMUNE';
cursor c1 is select
        dbms_rowid.rowid_block_number(rowid) as numero_bloc,
        count(dbms_rowid.rowid_row_number(rowid)) as nbre_tuples
        from commune
        group by dbms_rowid.rowid_block_number(rowid) order by nbre_tuples desc;
i integer;
begin
i :=0;
for c_t in c1
loop
dbms_output.put_line(' numero bloc : '||c_t.numero_bloc||' || nombre tuples/bloc : '
||c_t.nbre_tuples);
i :=i+1;
end loop;
dbms_output.put_line(' ');
dbms_output.put_line('nombre de blocs parcourus '||i);
dbms_output.put_line('***** ');
for c_t in c
loop
dbms_output.put_line('Espace de tables : '||c_t.tablespace_name||' || nbre tuples
total : '||c_t.num_rows||
' || blocs +/- remplis : '||c_t.blocks||' || blocs vides : '||c_t.empty_blocks||
' || espace libre/bloc (octets) : '||c_t.avg_space);
dbms_output.put_line('***** ');
dbms_output.put_line(' || taille moyenne tuple (octets) : '||c_t.avg_row_len||'
|| espace stockage (Mo) : '||round((c_t.num_rows*c_t.avg_row_len)/(1024*1024),2)
);
end loop;
end ;

procedure VueLibrairieRequetes is
cursor C is select parsing_schema_name, count(*) as nbrReq, sum(cpu_time)/1000000
as tempsCPU,
sum(disk_reads) as lecturesDisque, sum(buffer_gets) as lecturesCache from
v$sqlarea where parsing_schema_name is not null group by parsing_schema_name;
begin
dbms_output.put_line('consultation du cache de requetes (library cache) :');
dbms_output.put_line('*****');
dbms_output.put_line(rpad('Schema ',25)||rpad('Req ',15)||rpad('CPU sec ',20)||
rpad('Disk ',15)||rpad('Cache ',15));
for t in C
loop
dbms_output.put_line(
        rpad(t.parsing_schema_name,25) || rpad(t.nbrReq, 15) ||
        rpad(t.tempsCPU,20) ||
        rpad(t.lecturesDisque,15) ||
        rpad(t.lecturesCache,15)
);
end loop;
dbms_output.put_line('*****');
end;

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end tpnotel;
/

exec tpnotel.structurecommune
exec tpnotel.vuelibrairieRequetes

-----
create or replace trigger T1
before insert or delete or update on emp
for each row
begin
if inserting
then dbms_output.put_line('insertion reussie pour emp : '||:new.nom);
elsif deleting
then dbms_output.put_line('suppression reussie pour emp : '||:old.nom);
elsif updating
then dbms_output.put_line('mise a jour reussie pour emp : '||:old.num||' et
nouvelle valeur: '||:new.num);
end if;
end;
/

update emp set num=15000 where nom ='BARA';
-----

explain plan for select nom_com, latitude, longitude from commune where dep in (
select dep from departement where nom_dep in ('HERAULT','GARD'));

--deuxième cas (join)

explain plan for select nom_com, latitude, longitude from commune c
inner join departement d on c.dep = d.dep
where nom_dep in ('HERAULT','GARD');

select plan_table_output from table(dbms_xplan.display());

--troisième cas (exists)

explain plan for select nom_com, latitude, longitude from commune c where exists(
select * from departement d where c.dep = d.dep and nom_dep in ('HERAULT','GARD'));

--Quatrième cas Union
explain plan for select nom_com, latitude, longitude from commune c, departement d
where c.dep=d.dep and nom_dep='HERAULT'
union select nom_com, latitude, longitude from commune c, departement d where
c.dep=d.dep and nom_dep='GARD';

```