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-- Grupa 233 - Semigrupa 2

-- 1.

set echo off;

set serveroutput on;

DECLARE

type tabl\_id is table of number;

t tabl\_id := tabl\_id();

salariu number;

BEGIN

for i in 1..5 loop

t.extend;

end loop;

select \* bulk collect into t

from (

select employee\_id

from emp\_ipc

where commission\_pct is null

order by salary )

where rownum <= 5;

for i in t.first..t.last loop

```
select salary into salariu from emp_ipc where employee_id = t(i);  
dbms_output.put_line('Salariu vechi: ' || salariu || ', Salariu nou: ' || salariu*1.05);  
update emp_ipc set salary = salary*1.05 where employee_id = t(i);  
end loop;
```

```
END;
```

```
-- 2.
```

```
create or replace type tip_orase_ipc as varray(10) of varchar2(20);
```

```
create table excursie_ipc(
```

```
    cod_excursie number(4),  
    denumire varchar2(20),  
    orase tip_orase_ipc,  
    status varchar2(20),  
    constraint excursie_ipc_chk check (lower(status) = 'disponibil' or lower(status) = 'anulat')
```

```
);
```

```
commit;
```

```
DECLARE
```

```
v_exc excursie_ipc.cod_excursie%TYPE:= '&p_id';  
t_mod tip_orase_ipc;  
v_oras1 number;  
v_oras2 number;
```

```
v_oras3 number;
```

```
v_interm varchar2(20);
```

```
v_minim number := 11;
```

```
BEGIN
```

```
-- a
```

```
insert into excursie_ipc
```

```
values (1, 'A', tip_orase_ipc('Buenos Aires','Iguazu'),'Disponibil');
```

```
insert into excursie_ipc
```

```
values (2, 'B', tip_orase_ipc('Bologna'), 'Anulat');
```

```
insert into excursie_ipc
```

```
values (3, 'C', tip_orase_ipc('Verona','Rimini','Tirol'),'Disponibil');
```

```
insert into excursie_ipc
```

```
values (4, 'D', tip_orase_ipc('Cappadocia'),'Disponibil');
```

```
insert into excursie_ipc
```

```
values (5, 'E', tip_orase_ipc('Valencia','Barcelona'),'Anulat');
```

```
-- b
```

```
select orase into t_mod
```

```
from excursie_ipc
```

```
where cod_excursie = v_exc;
```

```
t_mod.extend; t_mod(t_mod.count) := 'Ultim';
```

```
t_mod.extend;
```

```
for i in reverse t_mod.first..t_mod.last loop
```

```
    if i > 1 then
```

```
        t_mod(i) := t_mod(i-1);
```

```
    end if;
```

```
end loop;
```

```
t_mod(2) := 'Al doilea';
```

```
for i in t_mod.first..t_mod.last loop
```

```
    if (t_mod(i) = 'Verona') then
```

```
        v_oras1 := i;
```

```
    elsif (t_mod(i) = 'Tirol') then
```

```
        v_oras2 := i;
```

```
    elsif (t_mod(i) = 'Rimini') then
```

```
        v_oras3 := i;
```

```
    end if;
```

```
end loop;
```

```
v_interm := t_mod(v_oras1);
```

```
t_mod(v_oras1) := t_mod(v_oras2);
```

```
t_mod(v_oras2) := v_interm;
```

```
for i in t_mod.first..t_mod.last-1 loop
```

```
    if i >= v_oras3 then
```

```
        t_mod(i) := t_mod(i+1);
```

```
    end if;
```

```
end loop;
```

```
t_mod.trim;
```

```
update excursie_ipc
```

```
set orase = t_mod
```

```
where cod_excursie = v_exc;
```

```
-- c
```

```
dbms_output.put_line(t_mod.count);
```

```
for i in t_mod.first..t_mod.last loop
```

```
    dbms_output.put_line(t_mod(i));
```

```
end loop;
```

```
dbms_output.put_line("");
```

```
-- d
```

```
for i in (select * from excursie_ipc) loop
```

```
    dbms_output.put(i.cod_excursie || ' : ');
```

```
    for j in i.orase.first..i.orase.last loop
```

```
        dbms_output.put(i.orase(j) || ' ');
```

```
    end loop;
```

```
    dbms_output.put_line("");
```

```
end loop;
```

```
dbms_output.put_line("");
```

```
-- e
```

```
for i in (select * from excursie_ipc) loop
```

```
    if i.orase.count < v_minim then
```

```
        v_minim := i.orase.count;
```

```
    end if;
```

```
end loop;
```

```
for i in (select * from excursie_ipc) loop
```

```
    if i.orase.count = v_minim then
```

```
        update excursie_ipc set status = 'Anulat' where cod_excursie = i.cod_excursie;
```

```
    end if;
```

```
end loop;
```

```
END;
```

```
rollback;
```

```
select * from excursie_ipc;
```

```
-- 3.
```

```
create or replace type tip_orase_ipc is table of varchar2(20);
```

```
create table excursie_ipc(
```

```
    cod_excursie number(4),
```

```
    denumire varchar2(20),
```

```
    orase tip_orase_ipc,
```

```
    status varchar2(20),
```

```
constraint excursie_ipc_chk check (lower(status) = 'disponibil' or lower(status) = 'anulat')
```

```
) nested table orase store as tabel_orase_ipc;
```

```
commit;
```

```
DECLARE
```

```
v_exc excursie_ipc.cod_excursie%TYPE:= '&p_id';
```

```
t_mod tip_orase_ipc;
```

```
v_oras1 number;
```

```
v_oras2 number;
```

```
v_oras3 number;
```

```
v_interm varchar2(20);
```

```
v_minim number := 11;
```

```
BEGIN
```

```
-- a
```

```
insert into excursie_ipc
```

```
values (1, 'A', tip_orase_ipc('Buenos Aires','Iguazu'),'Disponibil');
```

```
insert into excursie_ipc
```

```
values (2, 'B', tip_orase_ipc('Bologna'), 'Anulat');
```

```
insert into excursie_ipc
```

```
values (3, 'C', tip_orase_ipc('Verona','Rimini','Tirol'),'Disponibil');
```

```
insert into excursie_ipc  
values (4, 'D', tip_orase_ipc('Cappadocia'),'Disponibil');
```

```
insert into excursie_ipc  
values (5, 'E', tip_orase_ipc('Valencia','Barcelona'),'Anulat');
```

```
-- b
```

```
select orase into t_mod  
from excursie_ipc  
where cod_excursie = v_exc;
```

```
t_mod.extend; t_mod(t_mod.count) := 'Ultim';
```

```
t_mod.extend;  
for i in reverse t_mod.first..t_mod.last loop  
    if i > 1 then  
        t_mod(i) := t_mod(i-1);  
    end if;  
end loop;  
t_mod(2) := 'Al doilea';
```

```
for i in t_mod.first..t_mod.last loop  
    if (t_mod(i) = 'Verona') then  
        v_oras1 := i;  
    elsif (t_mod(i) = 'Tirol') then  
        v_oras2 := i;  
    elsif (t_mod(i) = 'Rimini') then  
        v_oras3 := i;
```



```

        end if;
    end loop;

    v_interm := t_mod(v_oras1);
    t_mod(v_oras1) := t_mod(v_oras2);
    t_mod(v_oras2) := v_interm;

    for i in t_mod.first..t_mod.last-1 loop
        if i >= v_oras3 then
            t_mod(i) := t_mod(i+1);
        end if;
    end loop;
    t_mod.trim; -- Din moment ce aici nu este utilizat varray, mai exista metoda cu delete

    update excursie_ipc
    set orase = t_mod
    where cod_excursie = v_exc;

-- c

    dbms_output.put_line(t_mod.count);

    for i in t_mod.first..t_mod.last loop
        dbms_output.put_line(t_mod(i));
    end loop;

    dbms_output.put_line("");

-- d

```

```
for i in (select * from excursie_ipc) loop
    dbms_output.put(i.cod_excursie || ' : ');
    for j in i.orase.first..i.orase.last loop
        dbms_output.put(i.orase(j) || ' ');
    end loop;
    dbms_output.put_line("");
end loop;
```

```
dbms_output.put_line("");
```

```
-- e
```

```
for i in (select * from excursie_ipc) loop
    if i.orase.count < v_minim then
        v_minim := i.orase.count;
    end if;
end loop;
```

```
for i in (select * from excursie_ipc) loop
    if i.orase.count = v_minim then
        update excursie_ipc set status = 'Anulat' where cod_excursie = i.cod_excursie;
    end if;
end loop;
```

```
END;
```

```
rollback;
```

```
select * from excursie_ipc;
```