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-- Grupa 233 - Semigrupa 2

-- 1. a)

set echo off;

set serveroutput on;

DECLARE

v_nr number(4);

v_title jobs.job_title%type;

v_job jobs.job_id%type;

v_nume employees.last_name%type;

v_salariu employees.salary%type;

cursor c_nr is

select j.job_title, j.job_id, count(employee_id)

from employees e, jobs j

where e.job_id = j.job_id

group by j.job_title, j.job_id;

cursor c_ang (job jobs.job_id%type) is

select e.last_name, e.salary

from employees e

where e.job_id = job;

```
BEGIN
```

```
open c_nr;
```

```
loop
```

```
    fetch c_nr into v_title,v_job,v_nr;
```

```
    exit when c_nr%notfound;
```

```
    dbms_output.put_line(v_title || ' : ');
```

```
    if v_nr = 0 then dbms_output.put_line('Nu exista angajati pe acest job');
```

```
    else
```

```
        begin
```

```
            dbms_output.put_line(v_nr || ' angajati cu acest job');
```

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

```
            open c_ang(v_job);
```

```
                loop
```

```
                    fetch c_ang into v_nume,v_salariu;
```

```
                    exit when c_ang%notfound;
```

```
                    dbms_output.put_line('Nume: ' || v_nume || ' Salariu: ' || v_salariu);
```

```
                end loop;
```

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

```
            close c_ang;
```

```
        end;
```

```
    end if;
```

```
end loop;
```

```
close c_nr;
```

```
END;
```

```
-- 1. b)
```

DECLARE

v_nr number(4);

v_title jobs.job_title%type;

v_job jobs.job_id%type;

v_nume employees.last_name%type;

v_salariu employees.salary%type;

cursor c_nr is

```
select j.job_title titlu, j.job_id id, count(employee_id) nr
from employees e, jobs j
where e.job_id = j.job_id
group by j.job_title,j.job_id;
```

cursor c_ang (job jobs.job_id%type) is

```
select e.last_name nume,e.salary salariu
from employees e
where e.job_id = job;
```

BEGIN

for i in c_nr loop

```
dbms_output.put_line(i.titlu || ' : ');
if i.nr = 0 then dbms_output.put_line('Nu exista angajati pe acest job');
else
begin
dbms_output.put_line(i.nr || ' angajati cu acest job');
dbms_output.put_line("");
```

```

        for j in c_ang(i.id) loop
            dbms_output.put_line('Nume: ' || j.ume || ' Salariu: ' || j.salariu);
        end loop;
        dbms_output.put_line("");
    end;
end if;
end loop;

```

```
END;
```

```
-- 1. c)
```

```
BEGIN
```

```

for i in (select j.job_title titlu, j.job_id id, count(employee_id) nr
        from employees e, jobs j
        where e.job_id = j.job_id
        group by j.job_title, j.job_id) loop
    dbms_output.put_line(i.titlu || ' : ');
    if i.nr = 0 then dbms_output.put_line('Nu exista angajati pe acest job');
    else
        begin
            dbms_output.put_line(i.nr || ' angajati cu acest job');
            dbms_output.put_line("");
            for j in (select e.last_name nume, e.salary salariu
                    from employees e
                    where e.job_id = i.id) loop
                dbms_output.put_line('Nume: ' || j.ume || ' Salariu: ' || j.salariu);
            end loop;
        end;
    end loop;

```

```
        dbms_output.put_line("");
    end;
end if;
end loop;
```

```
END;
```

```
-- 1. d)
```

```
DECLARE
```

```
type refcursor is ref cursor;
cursor c_ang is
    select j.job_title,
           cursor (select last_name,salary
                   from employees e
                   where e.job_id = j.job_id)
    from jobs j;
```

```
v_titlu   jobs.job_title%type;
v_cursor  refcursor;
v_nume    employees.last_name%type;
v_salariu employees.salary%type;
v_nr      number(4);
```

```
BEGIN
```

```

open c_ang;

loop
    fetch c_ang into v_titlu,v_cursor;
    exit when c_ang%notfound;

    v_nr := 0;
    dbms_output.put_line(v_titlu || ' : ');
    dbms_output.put_line("");

    loop
        fetch v_cursor into v_nume,v_salariu;
        exit when v_cursor%rowcount < 1 or v_cursor%notfound;

        v_nr := v_nr + 1;

        dbms_output.put_line('Nume: ' || v_nume || ' , Salariu: ' || v_salariu);
    end loop;

    if v_nr = 0 then dbms_output.put_line('Nu exista angajati cu acest job');
    else
        begin
            dbms_output.put_line("");
            dbms_output.put_line(v_nr || ' angajati pe acest job');
        end;
    end if;

    dbms_output.put_line("");
end loop;

```

END;

-- 2.

DECLARE

```
v_nr    number(4);
v_nr_total number(4);
v_title jobs.job_title%type;
v_job   jobs.job_id%type;
v_nume  employees.last_name%type;
v_salariu employees.salary%type;
v_salariu_job employees.salary%type;
v_salariu_total employees.salary%type;
v_id    number(4);
```

```
cursor c_nr is
    select j.job_title, j.job_id, count(employee_id)
    from employees e, jobs j
    where e.job_id = j.job_id
    group by j.job_title,j.job_id;
```

```
cursor c_ang (job jobs.job_id%type) is
    select e.last_name,e.salary
    from employees e
    where e.job_id = job;
```

```
BEGIN
```

```
v_salariu_total := 0;
v_nr_total := 0;
```

```
open c_nr;
```

loop

```
fetch c_nr into v_title,v_job,v_nr;
```

```
exit when c_nr%notfound;
```

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

```
dbms_output.put_line(v_title || ' : ');
```

```
v_nr_total := v_nr_total + v_nr;
```

```
v_salariu_job := 0;
```

```
if v_nr = 0 then dbms_output.put_line('Nu exista angajati pe acest job');
```

```
else
```

```
begin
```

```
v_id := 1;
```

```
dbms_output.put_line(v_nr || ' angajati cu acest job');
```

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

```
open c_ang(v_job);
```

```
loop
```

```
fetch c_ang into v_nume,v_salariu;
```

```
exit when c_ang%notfound;
```

```
v_salariu_job := v_salariu_job + v_salariu;
```

```
dbms_output.put_line('NrOrd: ' || v_id || ' Nume: ' || v_nume || ' Salariu: ' || v_salariu);
```

```
v_id := v_id + 1;
```

```
end loop;
```

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

```
dbms_output.put_line('Valoare lunara a veniturilor: ' || v_salariu_job);
```

```
dbms_output.put_line('Valoare medie a veniturilor: ' || v_salariu_job/v_nr);
```

```
close c_ang;
```

```
v_salariu_total := v_salariu_total + v_salariu_job;
```

```
end;
```

```
end if;
```

```
end loop;
```



```
close c_nr;
```

```
dbms_output.put_line('');
```

```
dbms_output.put_line('Nr. total angajati: ' || v_nr_total);
```

```
dbms_output.put_line('Valoare lunara a veniturilor: ' || v_salariu_total);
```

```
dbms_output.put_line('Valoare medie a veniturilor: ' || trunc(v_salariu_total/v_nr_total));
```

```
END;
```

```
-- 3.
```

```
DECLARE
```

```
v_nr    number(4);
```

```
v_nr_total number(4);
```

```
v_title jobs.job_title%type;
```

```
v_job   jobs.job_id%type;
```

```
v_nume  employees.last_name%type;
```

```
v_salariu employees.salary%type;
```

```
v_salariu_job employees.salary%type;
```

```
v_salariu_total employees.salary%type;
```

```
v_id    number(4);
```

```
v_salariu_total2 employees.salary%type;
```

```
v_comision employees.commission_pct%type;
```

```
v_procentaj number(4);
```

```
cursor c_nr is
```

```
    select j.job_title, j.job_id, count(employee_id)
```

```
    from employees e, jobs j
```

```
where e.job_id = j.job_id  
group by j.job_title,j.job_id;
```

```
cursor c_ang (job jobs.job_id%type) is  
    select e.last_name,e.salary,e.commission_pct  
    from employees e  
    where e.job_id = job;
```

```
cursor c_ang2 is  
    select e.last_name,e.salary,e.commission_pct  
    from employees e;
```

```
BEGIN
```

```
v_salariu_total := 0;  
v_salariu_total2 := 0;  
v_nr_total := 0;
```

```
open c_nr;  
loop  
    fetch c_nr into v_title,v_job,v_nr;  
    exit when c_nr%notfound;  
    dbms_output.put_line("");  
    dbms_output.put_line(v_title || ' : ');  
    v_nr_total := v_nr_total + v_nr;  
    v_salariu_job := 0;  
    if v_nr = 0 then dbms_output.put_line('Nu exista angajati pe acest job');  
    else  
        begin
```

```

v_id := 1;

dbms_output.put_line(v_nr || ' angajati cu acest job');

dbms_output.put_line("");

open c_ang(v_job);

    loop

        fetch c_ang into v_nume,v_salariu,v_comision;

        exit when c_ang%notfound;

        dbms_output.put_line('Comision : ' || v_comision);

        v_salariu_job := v_salariu_job + v_salariu;

        v_salariu_total2 := v_salariu_total2 + v_salariu + (v_salariu*nvl(v_comision,0));

        dbms_output.put_line('NrOrd: ' || v_id || ' Nume: ' || v_nume || ' Salariu: ' || v_salariu);

        v_id := v_id + 1;

    end loop;

    dbms_output.put_line("");

    dbms_output.put_line('Valoare lunara a veniturilor: ' || v_salariu_job);

    dbms_output.put_line('Valoare medie a veniturilor: ' || v_salariu_job/v_nr);

close c_ang;

v_salariu_total := v_salariu_total + v_salariu_job;

end;

end if;

end loop;

close c_nr;


dbms_output.put_line("");

dbms_output.put_line('Nr. total angajati: ' || v_nr_total);

dbms_output.put_line('Valoare lunara a veniturilor: ' || v_salariu_total);

dbms_output.put_line('Valoare medie a veniturilor: ' || trunc(v_salariu_total/v_nr_total));


dbms_output.put_line("");

```

```
dbms_output.put_line('Valoare alocata pentru salarii + comisioane: ' || v_salariu_total2);  
dbms_output.put_line('');
```

```
open c_ang2;
```

```
loop
```

```
    fetch c_ang2 into v_nume,v_salariu,v_comision;
```

```
    exit when c_ang2%notfound;
```

```
    v_procentaj := (v_salariu + (v_salariu * nvl(v_comision,0)))*100 / v_salariu_total2;
```

```
    dbms_output.put_line('Nume: ' || v_nume || ', Procentaj: ' || v_procentaj);
```

```
end loop;
```

```
close c_ang2;
```

```
END;
```