Prova 1

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1

A

```
set search_path to sfp;

select cpf,nomepes,salariofun
from funcionario as f natural join pessoa
```

B

```
set search_path to sfp;

select cpf,nomepes,salariofun, valorbol
from funcionario as f, pessoa as p, bolsista as b
where
    f.idpes = p.idpes
    and
    b.idpes = p.idpes
    and
    f.salariofun<b.valorbol
```

C

```
select cpf, nomepes, 'funcionario' as tipo, salariofun as valor from
    funcionario as f natural join pessoa as p
union
select cpf, nomepes, 'bolsista', valorbol as valor from
    bolsista as b natural join pessoa as p
order by p.cpf;
```

D

```
set search_path to sfp;

select p.cpf, p.nomepes
    from  pessoa as p
    where(
```

```
        select count(idati)
        from pesati as pa
        where pa.idpes = p.idpes
    ) > 1

order by p.cpf
```

E

```
set search_path to sfp;

select p.cpf,p.nomepes, pr.nomepro
    from  (pessoa as p natural join funcionario as f) left outer join projeto as
pr on pr.idpes = f.idpes

order by p.nomepes
```

F

```
set search_path to sfp;

select p.cpf, p.nomepes, count(p.idpes) as QtdeAtividades
    from  pessoa as p natural join bolsista as b natural join pesati as pa
    where(
        select count(idati)
        from pesati as pa
        where pa.idpes = p.idpes
    ) > 3

group by p.cpf,p.nomepes
```

G

```
set search_path to sfp;

select cpf, nomepes from (pessoa natural join projeto) p_pr
    where idpro = 1 and not exists (
        select idati from atividade where atividade.idpro = 1 and not exists (
            select idati from pesati where p_pr.idpes = pesati.idpes
        )
    );
```

2

```
set search_path to sfp;

with recursive tAtivs(idati, idpro, nivel, idatisuper, descricaoati) as (
    select idati, idpro, 0 as nivel, idatisuper, descricaoati
    from atividade as base_case
    where base_case.idatisuper is NULL
        union all
    select filho.idati, filho.idpro, nivel + 1, filho.idatisuper,
filho.descricaoati
    from tAtivs as pai, atividade as filho
    where pai.idati = filho.idatisuper
)

select idpro, nivel, idatisuper, idati, descricaoati from tAtivs ORDER BY idpro,
nivel, idatisuper, descricaoati;
```

3

Criação da view vtop

```
set search_path to sfp;

create or replace view vtop as
    select func_rico.cpf, func_rico.nomepes, 'funcionario' as tipopes,
func_rico.salariofun as maxvalue
    from
        (funcionario natural join pessoa) func_rico
        where not exists(
            select salariofun from funcionario as func_pobre
            where func_rico.salariofun < func_pobre.salariofun
        )
        union
        select bolsista_rico.cpf, bolsista_rico.nomepes, 'bolsista' as tipopes,
bolsista_rico.valorbol as maxvalue
    from
        (bolsista natural join pessoa) bolsista_rico
        where not exists(
            select valorbol from bolsista as bolsista_pobre
            where bolsista_rico.valorbol < bolsista_pobre.valorbol
        )
```

A

```
select idpes,nomepes, maxvalue from vtop where tipopes = 'funcionario'
```

B

```
select idpes,nomepes, maxvalue from vtop where tipopes = 'bolsista'
```

C

```
select nomepes, maxvalue from vtop
    where tipopes = 'funcionario' and not (
        select idpes from bolsista where vtop.idpes = bolsista.idpes
    )
```