

Questao 1)

A)

```
select nomepes, titulospil
from pessoa, piloto
where pessoa.idpes = piloto.idpes;
select nomepes, titulospil
from piloto inner join pessoa on pessoa.idpes = piloto.idpes group by nomepes,
titulospil;
```

B)

```
select distinct idcir, nomecir, localcir
from (circuito natural join corrida) inner join participacao on
participacao.voltaspar < corrida.voltascor
where circuito.idcir = corrida.idcir;
```

C)

```
select nomecir, datacor, categoriacor
from circuito left outer join corrida on circuito.idcir = corrida.idcir order
by nomecir;
```

D)

```
SELECT nomeequ, COUNT(*) AS QtdeMecanicos
FROM (pessoa NATURAL JOIN mecanico) AS pemec JOIN equipe AS e ON
pemec.idequ=e.idequ GROUP BY nomeequ HAVING COUNT(*) > 1;
```

E)

```
SELECT nomepes FROM (piloto NATURAL JOIN pessoa) AS pipe
WHERE NOT EXISTS (SELECT * FROM (circuito NATURAL JOIN corrida) AS cico
WHERE nomecir='Interlagos' AND NOT EXISTS (SELECT * FROM participacao AS p
WHERE pipe.idpes=p.idpes AND cico.idcor=p.idcor));
```

Questao 2)

```
CREATE VIEW vencedores AS
```

```
(SELECT DISTINCT corrida1.idcor, datacor, categoriacor, nomepes AS nomeven,
'Piloto'
```

```
AS tipoven
```

```
FROM corrida corrida1, participacao participacao1, piloto piloto1, pessoa
pessoa1
```

```
WHERE corrida1.idcor=participacao1.idcor
```

```
AND participacao1.idpes=piloto1.idpes
```

```
AND piloto1.idpes=pessoa1.idpes
```

```
AND participacao1.tempopar <= ALL (SELECT tempopar
```

```
FROM participacao participacao2
```

```
WHERE participacao1.idcor=participacao2.idcor
```

```
AND participacao1.idpes<>participacao2.idpes
```

```
AND participacao1.voltaspar=participacao2.voltaspar)
```

```
)
```

```
UNION
```

```
(SELECT DISTINCT corrida1.idcor, datacor, categoriacor, nomeequ AS nomeven,
'Equipe'
```

```
AS tipoven
```

```
FROM corrida corrida1, participacao participacao1, equipe equipe1, pessoa
pessoa1
```

```
WHERE corrida1.idcor=participacao1.idcor
```

```
AND participacao1.idpes=pessoa1.idpes
```

```
AND equipe1.idequ=pessoa1.idequ
```

```
AND participacao1.tempopar <= ALL (SELECT tempopar
```

```

FROM participacao participacao2
WHERE participacao1.idcor=participacao2.idcor
AND participacao1.idpes<>participacao2.idpes
AND participacao1.voltaspar=participacao2.voltaspar)
)
SELECT * FROM vencedores ORDER BY 5, 1;

```

Questao 3)

```

WITH RECURSIVE mecsup(nivel, idsup, idpes, nomeequ, nomepes, especialidademec)
AS (SELECT 0, root.idsup, root.idpes, root.nomeequ, root.nomepes,
root.especialidademec
FROM (mecanico NATURAL JOIN pessoa NATURAL JOIN equipe) AS root
WHERE root.idpes = root.idsup UNION ALL SELECT nivel+1, child.idsup,
child.idpes, child.nomeequ, child.nomepes, child.especialidademec
FROM mecsup parent, (mecanico NATURAL JOIN pessoa NATURAL JOIN equipe) AS
child
WHERE child.idsup = parent.idpes AND child.nomeequ=parent.nomeequ
AND child.idpes <> parent.idpes )
SELECT DISTINCT nivel, idsup, idpes, nomepes, especialidademec
FROM mecsup WHERE nomeequ = 'Canarinho' ORDER BY 1, 2, 3;

```