

Questão 1

Comandos:

1ª Forma:

```
select *
from sp.p
where pname != 'Nut' and color in
      (select color from sp.p where pname = 'Nut')
```

2ª Forma:

```
select b.*
from sp.p a,sp.p b
where a.color=b.color and a.pname = 'Nut' and b.pname != 'Nut'
```

Resposta:

<input type="checkbox"/>	pcod integer	pname character	color character	weight integer	city character
<input type="checkbox"/>	4	Screw	Red	14	London
<input type="checkbox"/>	6	Cog	Red	19	London

Questão 2-

Observação: Como uma peça pode apresentar cores diferentes, e na resposta estamos exibindo todos atributos da peça, optamos por considerar como sendo diferentes uma peça que apresente mais de uma cor(de fato cada uma já possui um pcod distinto para cada cor).

Comandos:

1ª Forma:

```
select *
from sp.p a
where color in
      (select color from sp.p b where a.color = b.color and a.pname
      != b.pname )
```

2ª Forma:

```
select distinct a.*
from sp.p b inner join sp.p a
on a.color=b.color and a.pcod != b.pcod
order by pcod
```

Resposta:

<input type="checkbox"/>	pcode integer	pname character	color character	weight integer	city character
<input type="checkbox"/>	1	Nut	Red	12	London
<input type="checkbox"/>	3	Screw	Blue	17	Rome
<input type="checkbox"/>	4	Screw	Red	14	London
<input type="checkbox"/>	5	Cam	Blue	12	Paris
<input type="checkbox"/>	6	Cog	Red	19	London

Questão 3

Comandos:

1ª Forma:

```
select distinct color
from sp.p a
group by color
having avg(weight) >=
(select avg(weight) from sp.p)
```

2ª Forma:

Resposta:

<input type="checkbox"/>	color character
<input type="checkbox"/>	Green

Questão 4

Comandos:

1ª Forma:

```
select *
from sp.p
where weight >
(select max(weight) from sp.p where color='Blue')
```

2ª Forma:

Resposta:

<input type="checkbox"/>	pcod integer	pname character	color character	weight integer	city character
<input type="checkbox"/>	6	Cog	Red	19	London

Questão 5

Comandos:

1ª Forma:

```
select *
from sp.p a
where weight >
(select avg(weight)
 from sp.p b
 where a.color=b.color)
```

2ª Forma:

Resposta:

<input type="checkbox"/>	pcod integer	pname character	color character	weight integer	city character
<input type="checkbox"/>	3	Screw	Blue	17	Rome
<input type="checkbox"/>	6	Cog	Red	19	London

Questão 6

Comandos:

1ª Forma:

```
select distinct city
from sp.p
where exists
(select city
 from sp.s
 where s.city=p.city)
```

2ª Forma:

```
select distinct a.city
from sp.p a inner join sp.s b
on a.city=b.city
```

Resposta:

<input type="checkbox"/>	city character
<input type="checkbox"/>	Paris
<input type="checkbox"/>	London

Questão 7

Comandos:

1ª Forma:

```
select distinct city
from sp.p
where not exists
(select city
 from sp.s
 where s.city=p.city)
```

2ª Forma:

```
select distinct a.city
from sp.p a left outer join sp.s b
      on a.city=b.city
where a.city not in (select distinct a.city
from sp.p a inner join sp.s b
      on a.city=b.city)
```

3ª forma:

```
select distinct a.city
from sp.p a where a.city not in
(select distinct a.city
from sp.p a inner join sp.s b
      on a.city=b.city)
```

Resposta:

<input type="checkbox"/>	city character
<input type="checkbox"/>	Rome

Questão 8

Comandos:

1ª Forma:

```
select distinct city
from sp.s
where not exists
(select city
 from sp.p
 where s.city=p.city)
```

2ª Forma:

```
select distinct b.city
from sp.s b where b.city not in (select distinct b.city
from sp.p a inner join sp.s b
 on a.city=b.city)
```

3ª Forma:

```
select distinct b.city
from sp.p a right outer join sp.s b
 on a.city=b.city
where b.city not in (select distinct b.city
from sp.p a inner join sp.s b
 on a.city=b.city)
```

Resposta:

<input type="checkbox"/>	city character
<input type="checkbox"/>	Athens

Questão 9

Comandos:

1ª Forma:

```
select *
from sp.s f
where not exists
(select *
 from sp.p prod
 where not exists
 (select * from sp.sp r
  where f.scod = r.scod and r.pcod=prod.pcod))
```

Observação:

para obter a junção (repetindo colunas):

```
select *
from sp.sp a, sp.s b, sp.p c
where b.scod=a.scod and c.pcod=a.pcod;
```

2ª Forma:

Resposta:

<input type="checkbox"/>	scod integer	sname character	status character	city character
<input type="checkbox"/>	1	Smith	20	London

Questão 10

Comandos:

1ª Forma:

```
select scod from sp.s where status = (select max(status) from
sp.s);
```

2ª Forma:

```
select distinct a.scod
from sp.s a inner join sp.s b
on a.status=(select max(status) from sp.s)
```

Resposta:

<input type="checkbox"/>	scod integer
<input type="checkbox"/>	5
<input type="checkbox"/>	3

Questão 11

Comandos:

1ª Forma:

```
select sp.s.scod from sp.s
where sp.s.scod not in
(select scod from sp.sp where pcod=2);
```

2ª Forma:

Resposta:

<input type="checkbox"/>	scod integer
<input type="checkbox"/>	5

Questão 12

Comandos:

1ª Forma:

```
select sp.s.scod,sp.p.pcod from sp.s,sp.p
where (sp.s.scod,sp.p.pcod) not in
(select sp.sp.scod,sp.sp.pcod from (sp.s inner join sp.sp on
sp.s.scod = sp.sp.scod));
```

2ª Forma:

Resposta:

<input type="checkbox"/>	scod integer	pcod integer
<input type="checkbox"/>	2	3
<input type="checkbox"/>	2	4
<input type="checkbox"/>	2	5
<input type="checkbox"/>	2	6
<input type="checkbox"/>	3	1
<input type="checkbox"/>	3	3
<input type="checkbox"/>	3	4
<input type="checkbox"/>	3	5
<input type="checkbox"/>	3	6
<input type="checkbox"/>	4	1
<input type="checkbox"/>	4	3
<input type="checkbox"/>	4	6
<input type="checkbox"/>	5	1
<input type="checkbox"/>	5	2
<input type="checkbox"/>	5	3
<input type="checkbox"/>	5	4
<input type="checkbox"/>	5	5
<input type="checkbox"/>	5	6

Questão 13

Comandos:

1ª Forma:

```
select count(*) from (select sp.s.scod,count(sp.sp.pcod)  from
(sp.s
left join sp.sp on sp.s.scod = sp.sp.scod)
group by 1
having count(sp.sp.pcod) != ( select count(*) from sp.p )) a;
```

2ª Forma:

Resposta:

<input type="checkbox"/>	count bigint	
<input type="checkbox"/>		4

Questão 14

Comandos:

1ª Forma:

```
select distinct
    sp.s.scod,
    sp.sp.pcod
from sp.s
    left join sp.sp on sp.sp.scod = sp.s.scod;
```

2ª Forma:

Resposta:

<input type="checkbox"/>	scod integer	pcod integer
<input type="checkbox"/>	1	3
<input type="checkbox"/>	4	4
<input type="checkbox"/>	1	4
<input type="checkbox"/>	1	1
<input type="checkbox"/>	1	2
<input type="checkbox"/>	4	2
<input type="checkbox"/>	5	
<input type="checkbox"/>	4	5
<input type="checkbox"/>	3	2
<input type="checkbox"/>	1	5
<input type="checkbox"/>	1	6
<input type="checkbox"/>	2	2
<input type="checkbox"/>	2	1

Questão 15

Comandos:

1ª Forma:

```
select
    s.scod
    ,s.sname
    ,sp.pcod
    ,sum(sp.qty)
from sp.s
    left join sp.sp
        on sp.s.scod=sp.sp.scod
    left join sp.p
        on sp.p.pcod=sp.sp.pcod
where 1=1
group by 1,2,3
--having sum(sp.qty) > 300
```

2ª Forma:

Resposta:

<input type="checkbox"/>	scod integer	sname character	pcod integer	sum bigint
<input type="checkbox"/>	1	Smith	3	400
<input type="checkbox"/>	4	Clark	4	300
<input type="checkbox"/>	1	Smith	4	200
<input type="checkbox"/>	1	Smith	1	300
<input type="checkbox"/>	1	Smith	2	200
<input type="checkbox"/>	4	Clark	2	200
<input type="checkbox"/>	5	Adams		
<input type="checkbox"/>	4	Clark	5	400
<input type="checkbox"/>	3	Blake	2	200
<input type="checkbox"/>	1	Smith	5	100
<input type="checkbox"/>	1	Smith	6	100
<input type="checkbox"/>	2	Jones	2	400
<input type="checkbox"/>	2	Jones	1	300