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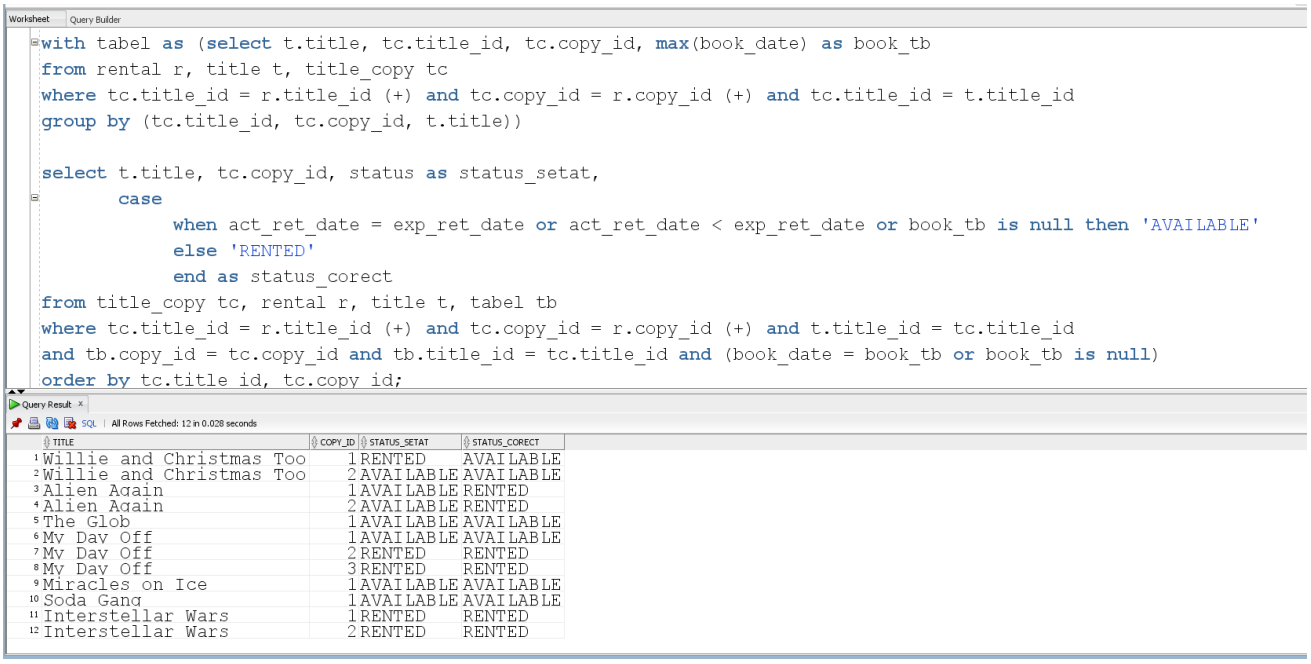
Grupa 233

TEMA LABORATOR 2

6. Afișați următoarele informații: titlul filmului, numărul exemplarului, statusul setat și statusul corect.

```
with tabel as (select t.title, tc.title_id, tc.copy_id, max(book_date) as book_tb
from rental r, title t, title_copy tc
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and tc.title_id = t.title_id
group by (tc.title_id, tc.copy_id, t.title))
select t.title, tc.copy_id, status as status_setat,
    case
        when act_ret_date = exp_ret_date or act_ret_date < exp_ret_date
        or book_tb is null then 'AVAILABLE'
        else 'RENTED'
        end as status_corect
from title_copy tc, rental r, title t, tabel tb
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and t.title_id = tc.title_id
and tb.copy_id = tc.copy_id and tb.title_id = tc.title_id and (book_date = book_tb or book_tb is null)
order by tc.title_id, tc.copy_id;
```



```
with tabel as (select t.title, tc.title_id, tc.copy_id, max(book_date) as book_tb
from rental r, title t, title_copy tc
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and tc.title_id = t.title_id
group by (tc.title_id, tc.copy_id, t.title))

select t.title, tc.copy_id, status as status_setat,
      case
           when act_ret_date = exp_ret_date or act_ret_date < exp_ret_date or book_tb is null then 'AVAILABLE'
           else 'RENTED'
           end as status_corect
from title_copy tc, rental r, title t, tabel tb
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and t.title_id = tc.title_id
and tb.copy_id = tc.copy_id and tb.title_id = tc.title_id and (book_date = book_tb or book_tb is null)
order by tc.title_id, tc.copy_id;
```

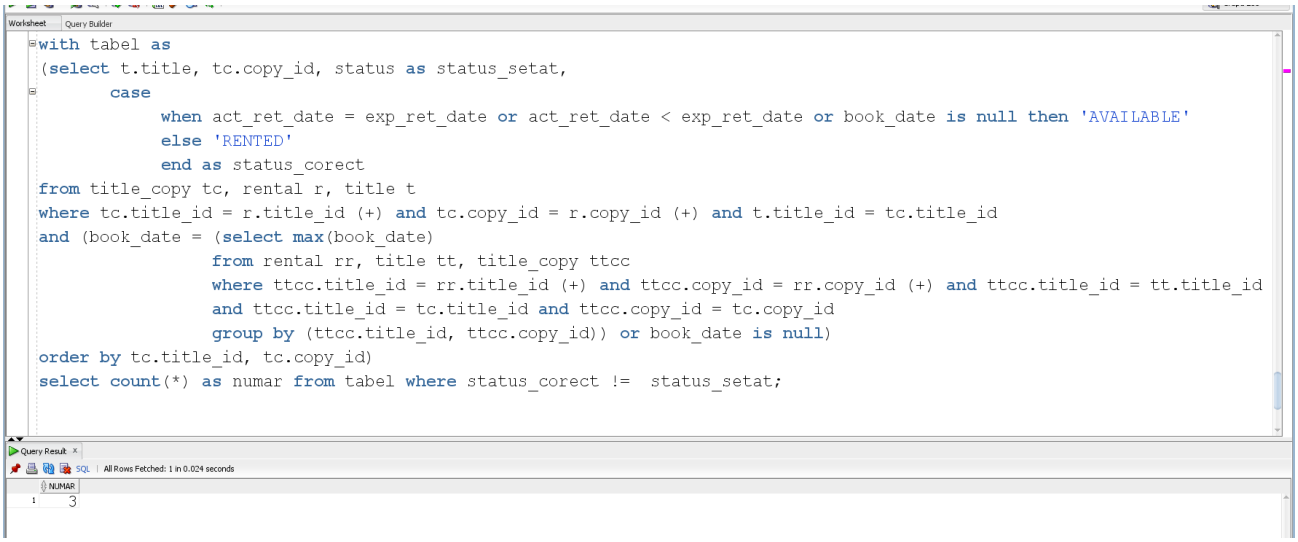
Query Result — All Rows Fetched: 12 in 0.028 seconds

	TITLE	COPY_ID	STATUS_SETAT	STATUS_CORECT
1	Willie and Christmas Too	1	RENTED	AVAILABLE
2	Willie and Christmas Too	2	AVAILABLE	AVAILABLE
3	Alien Again	1	AVAILABLE	RENTED
4	Alien Again	2	AVAILABLE	RENTED
5	The Glob	1	AVAILABLE	AVAILABLE
6	My Day Off	1	AVAILABLE	AVAILABLE
7	My Day Off	2	RENTED	RENTED
8	My Day Off	3	RENTED	RENTED
9	Miracles on Ice	1	AVAILABLE	AVAILABLE
10	Soda Gang	1	AVAILABLE	AVAILABLE
11	Interstellar Wars	1	RENTED	RENTED
12	Interstellar Wars	2	RENTED	RENTED

7. a. Câte exemplare au statusul eronat?

```
with tabel as (select t.title, tc.copy_id, status as status_setat,
    case
```

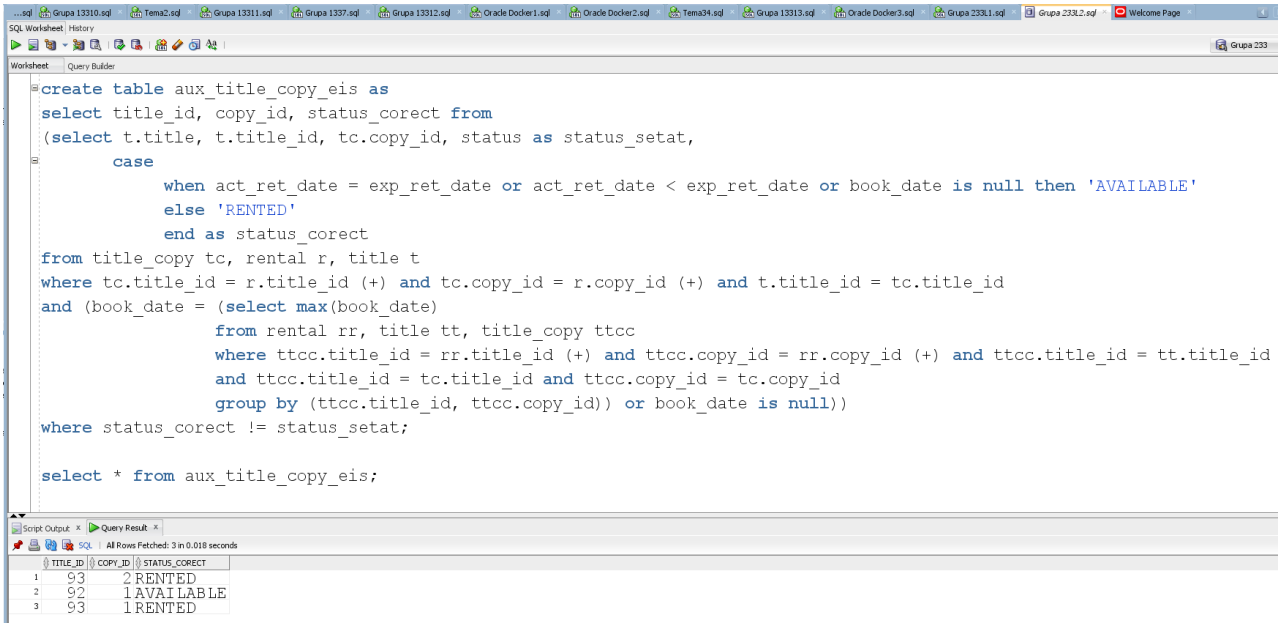
```
        when act_ret_date = exp_ret_date or act_ret_date < exp_ret_date or book_date is null then
'AVAILABLE'
        else 'RENTED'
        end as status_corect
from title_copy tc, rental r, title t
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and t.title_id = tc.title_id
and (book_date = (select max(book_date)
            from rental rr, title tt, title_copy ttcc
            where ttcc.title_id = rr.title_id (+) and ttcc.copy_id = rr.copy_id (+) and ttcc.title_id = tt.title_id
            and ttcc.title_id = tc.title_id and ttcc.copy_id = tc.copy_id
            group by (ttcc.title_id, ttcc.copy_id)) or book_date is null)
order by tc.title_id, tc.copy_id)
select count(*) as numar from tabel where status_corect !=  status_setat;
```



b. Setați statusul corect pentru toate exemplarele care au statusul eronat. Salvați actualizările realizate.

```
create table aux_title_copy_eis as
select title_id, copy_id, status_corect from
(select t.title, t.title_id, tc.copy_id, status as status_setat,
    case
        when act_ret_date = exp_ret_date or act_ret_date < exp_ret_date or book_date is null then
'AVAILABLE'
        else 'RENTED'
        end as status_corect
from title_copy tc, rental r, title t
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and t.title_id = tc.title_id
and (book_date = (select max(book_date)
            from rental rr, title tt, title_copy ttcc
            where ttcc.title_id = rr.title_id (+) and ttcc.copy_id = rr.copy_id (+) and ttcc.title_id = tt.title_id
            and ttcc.title_id = tc.title_id and ttcc.copy_id = tc.copy_id
            group by (ttcc.title_id, ttcc.copy_id)) or book_date is null))
```

where status_corect != status_setat;



```
create table aux_title_copy_eis as
select title_id, copy_id, status_corect from
(select t.title, t.title_id, tc.copy_id, status as status_setat,
       case
            when act_ret_date = exp_ret_date or act_ret_date < exp_ret_date or book_date is null then 'AVAILABLE'
            else 'RENTED'
            end as status_corect
from title_copy tc, rental r, title t
where tc.title_id = r.title_id (+) and tc.copy_id = r.copy_id (+) and t.title_id = tc.title_id
and (book_date = (select max(book_date)
                  from rental rr, title tt, title_copy ttcc
                  where ttcc.title_id = rr.title_id (+) and ttcc.copy_id = rr.copy_id (+) and ttcc.title_id = tt.title_id
                  and ttcc.title_id = tc.title_id and ttcc.copy_id = tc.copy_id
                  group by (ttcc.title_id, ttcc.copy_id)) or book_date is null))
where status_corect != status_setat;

select * from aux_title_copy_eis;
```

	TITLE_ID	COPY_ID	STATUS_CORECT
1	93	2	RENTED
2	92	1	AVAILABLE
3	93	1	RENTED

update title_copy_eis
set title_copy_eis.status = (select status_corect
from aux_title_copy_eis
where title_copy_eis.copy_id = aux_title_copy_eis.copy_id
and title_copy_eis.title_id = aux_title_copy_eis.title_id)
where exists (select *
from aux_title_copy_eis
where title_copy_eis.copy_id = aux_title_copy_eis.copy_id
and title_copy_eis.title_id = aux_title_copy_eis.title_id);

```
                  where ttcc.title_id = rr.title_id (+) and ttcc.copy_id = rr.copy_id (+) and ttcc.title_id = tt.titl
                  and ttcc.title_id = tc.title_id and ttcc.copy_id = tc.copy_id
                  group by (ttcc.title_id, ttcc.copy_id)) or book_date is null))
where status_corect != status_setat;

select * from aux_title_copy_eis;

update title_copy_eis
set title_copy_eis.status = (select status_corect
                             from aux_title_copy_eis
                             where title_copy_eis.copy_id = aux_title_copy_eis.copy_id
                             and title_copy_eis.title_id = aux_title_copy_eis.title_id)
where exists (select *
              from aux_title_copy_eis
              where title_copy_eis.copy_id = aux_title_copy_eis.copy_id
              and title_copy_eis.title_id = aux_title_copy_eis.title_id);
```

3 rows updated.

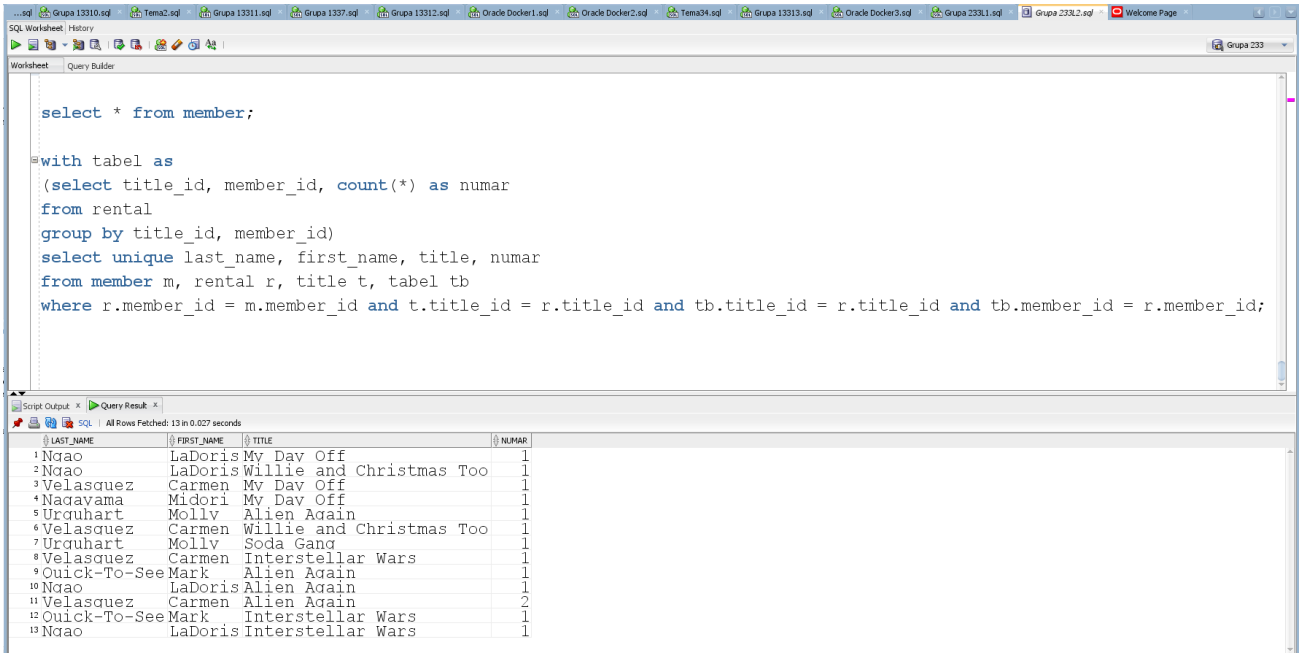
8. Toate filmele rezervate au fost împrumutate la data rezervării? Afișați textul “Da” sau ”Nu” în funcție de situație.

with tabel as
(select count(*)
from reservation res, rental ren
where ren.member_id = res.member_id and res.title_id = ren.title_id and res.res_date = ren.book_date)
select case
when (select count(*) from tabel minus select count(*) from reservation) != 0 then 'Nu'
else 'Da'
end as numar
from dual;

```
with tabel as
(select count(*)
from reservation res, rental ren
where ren.member_id = res.member_id and res.title_id = ren.title_id and res.res_date = ren.book_date)
select case
when (select count(*) from tabel minus select count(*) from reservation) != 0 then 'Nu'
else 'Da'
end as numar
from dual;
```

```
Script Output | Query Result | All Rows Fetched: 1 in 0.024 seconds
NUMAR
1 Nu
```

9. De câte ori a împrumutat un membru (nume și prenume) fiecare film (titlu)?



```
select * from member;

with tabel as
(select title_id, member_id, count(*) as numar
from rental
group by title_id, member_id)
select unique last_name, first_name, title, numar
from member m, rental r, title t, tabel tb
where r.member_id = m.member_id and t.title_id = r.title_id and tb.title_id = r.title_id and tb.member_id = r.member_id;
```

Script Output | Query Result | All Rows Fetched: 13 in 0.027 seconds

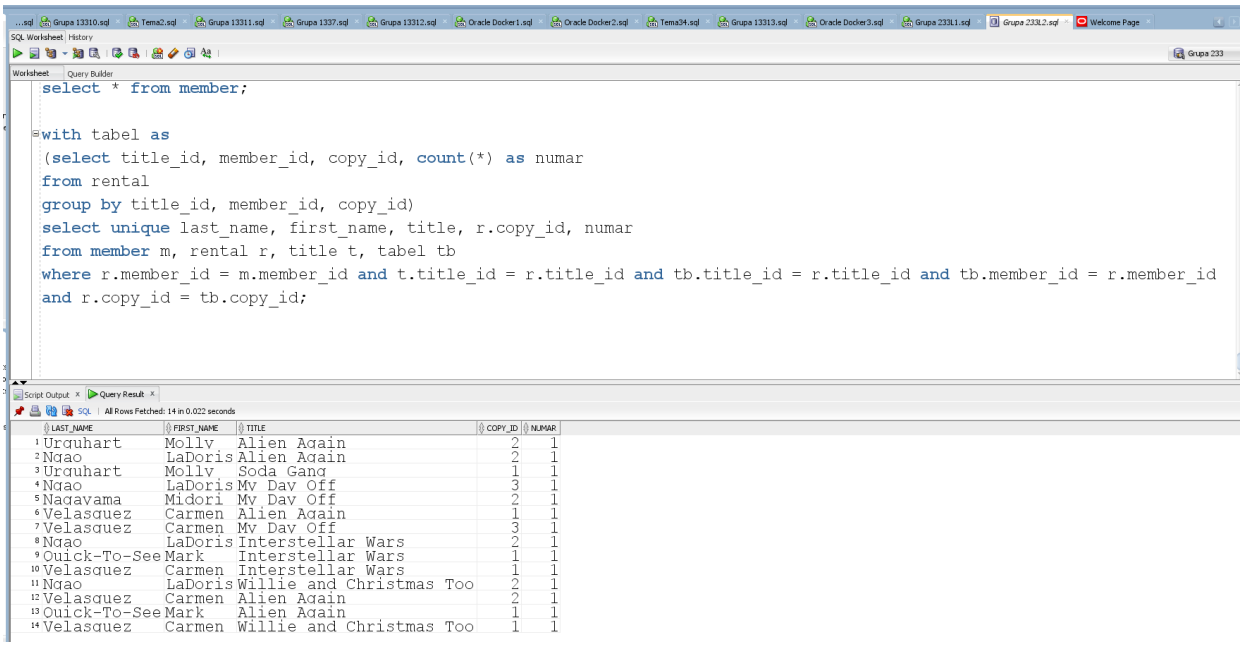
	LAST_NAME	FIRST_NAME	TITLE	NUMAR
1	Ngao	LaDoris	My Day Off	1
2	Ngao	LaDoris	Willie and Christmas Too	1
3	Velasquez	Carmen	My Day Off	1
4	Nagayama	Midori	My Day Off	1
5	Urquhart	Molly	Alien Again	1
6	Velasquez	Carmen	Willie and Christmas Too	1
7	Urquhart	Molly	Soda Gang	1
8	Velasquez	Carmen	Interstellar Wars	1
9	Quick-To-See	Mark	Alien Again	1
10	Ngao	LaDoris	Alien Again	1
11	Velasquez	Carmen	Alien Again	2
12	Quick-To-See	Mark	Interstellar Wars	1
13	Ngao	LaDoris	Interstellar Wars	1

with tabel as

(select title_id, member_id, count(*) as numar
from rental
group by title_id, member_id)
select unique last_name, first_name, title, numar
from member m, rental r, title t, tabel tb
where r.member_id = m.member_id and t.title_id = r.title_id and tb.title_id = r.title_id and
tb.member_id = r.member_id;

10. De câte ori a împrumutat un membru (nume și prenume) fiecare exemplar (cod) al unui film (titlu)?

with tabel as
(select title_id, member_id, copy_id, count(*) as numar
from rental
group by title_id, member_id, copy_id)
select unique last_name, first_name, title, r.copy_id, numar
from member m, rental r, title t, tabel tb
where r.member_id = m.member_id and t.title_id = r.title_id and tb.title_id = r.title_id and
tb.member_id = r.member_id
and r.copy_id = tb.copy_id;



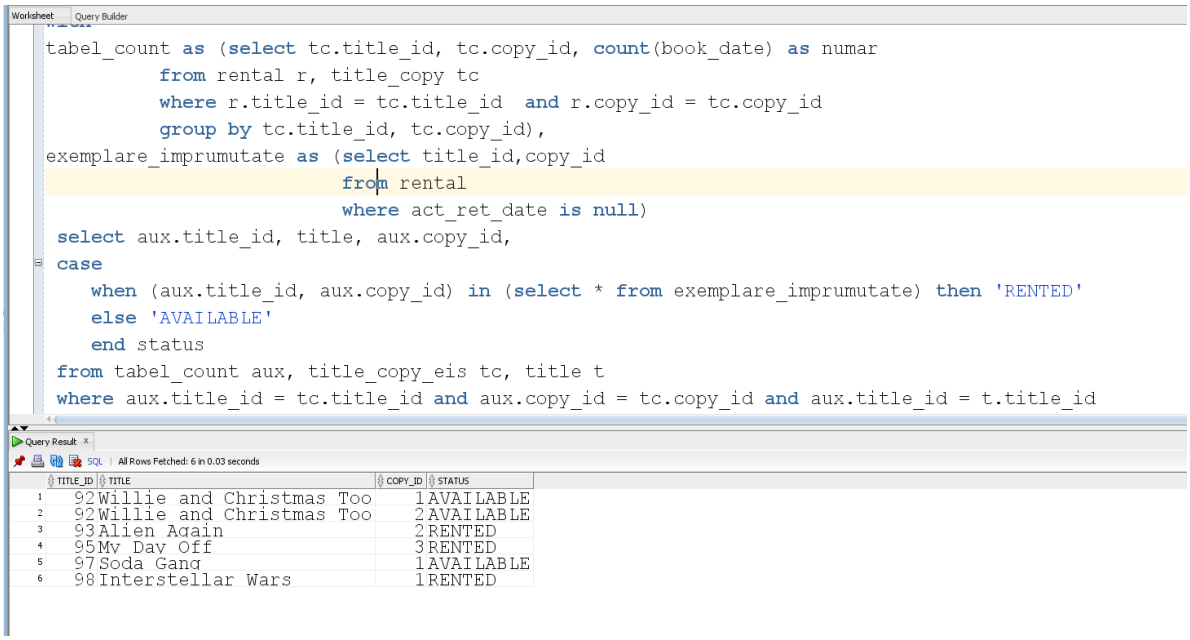
```
select * from member;

with tabel as
(select title_id, member_id, copy_id, count(*) as numar
from rental
group by title_id, member_id, copy_id)
select unique last_name, first_name, title, r.copy_id, numar
from member m, rental r, title t, tabel tb
where r.member_id = m.member_id and t.title_id = r.title_id and tb.title_id = r.title_id and tb.member_id = r.member_id
and r.copy_id = tb.copy_id;
```

	LAST_NAME	FIRST_NAME	TITLE	COPY_ID	NUMAR
1	Urquhart	Molly	Alien Again	2	1
2	Ngao	LaDoris	Alien Again	2	1
3	Urquhart	Molly	Soda Gang	1	1
4	Ngao	LaDoris	My Day Off	3	1
5	Nagayama	Midori	My Day Off	2	1
6	Velasquez	Carmen	Alien Again	1	1
7	Velasquez	Carmen	My Day Off	3	1
8	Ngao	LaDoris	Interstellar Wars	2	1
9	Quick-To-See	Mark	Interstellar Wars	1	1
10	Velasquez	Carmen	Interstellar Wars	1	1
11	Ngao	LaDoris	Willie and Christmas Too	2	1
12	Velasquez	Carmen	Alien Again	2	1
13	Quick-To-See	Mark	Alien Again	1	1
14	Velasquez	Carmen	Willie and Christmas Too	1	1

11. Obțineți statusul celui mai des împrumutat exemplar al fiecărui film (titlu).

with
tabel_count as (select tc.title_id, tc.copy_id, count(book_date) as numar
from rental r, title_copy tc
where r.title_id = tc.title_id and r.copy_id = tc.copy_id
group by tc.title_id, tc.copy_id),

```
exemplare_imprumutate as (select title_id,copy_id
                          from rental
                          where act_ret_date is null)
select aux.title_id, title, aux.copy_id,
case
  when (aux.title_id, aux.copy_id) in (select * from exemplare_imprumutate) then 'RENTED'
  else 'AVAILABLE'
  end status
from tabel_count aux, title_copy_eis tc, title t
where aux.title_id = tc.title_id and aux.copy_id = tc.copy_id and aux.title_id = t.title_id
and aux.numar = (select max(numar)
                 from tabel_count auxx
                 where auxx.title_id = aux.title_id)
order by aux.title_id, aux.copy_id;
```



```
tabel_count as (select tc.title_id, tc.copy_id, count(book_date) as numar
          from rental r, title_copy tc
          where r.title_id = tc.title_id  and r.copy_id = tc.copy_id
          group by tc.title_id, tc.copy_id),
exemplare_imprumutate as (select title_id,copy_id
                          from rental
                          where act_ret_date is null)
 select aux.title_id, title, aux.copy_id,
 case
    when (aux.title_id, aux.copy_id) in (select * from exemplare_imprumutate) then 'RENTED'
    else 'AVAILABLE'
    end status
 from tabel_count aux, title_copy_eis tc, title t
 where aux.title_id = tc.title_id and aux.copy_id = tc.copy_id and aux.title_id = t.title_id
```

Query Result — All Rows Fetched: 6 in 0.03 seconds

	TITLE_ID	TITLE	COPY_ID	STATUS
1	92	Willie and Christmas Too	1	AVAILABLE
2	92	Willie and Christmas Too	2	AVAILABLE
3	93	Alien Again	2	RENTED
4	95	My Day Off	3	RENTED
5	97	Soda Gang	1	AVAILABLE
6	98	Interstellar Wars	1	RENTED

12. Pentru anumite zile specificate din luna curentă, obțineți numărul de împrumuturi efectuate.

```
create table calendar_eis (ziua number);
create sequence zi_eis
increment by 1
start with 1;
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
```

```
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
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insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
insert into calendar_eis values(zi_eis.nextval);
```
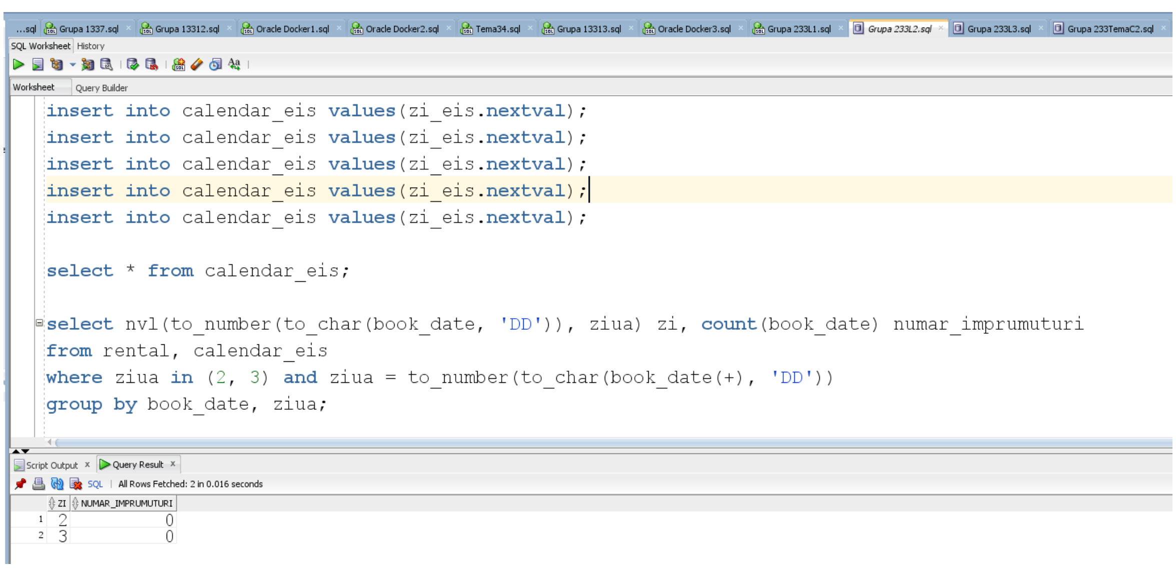
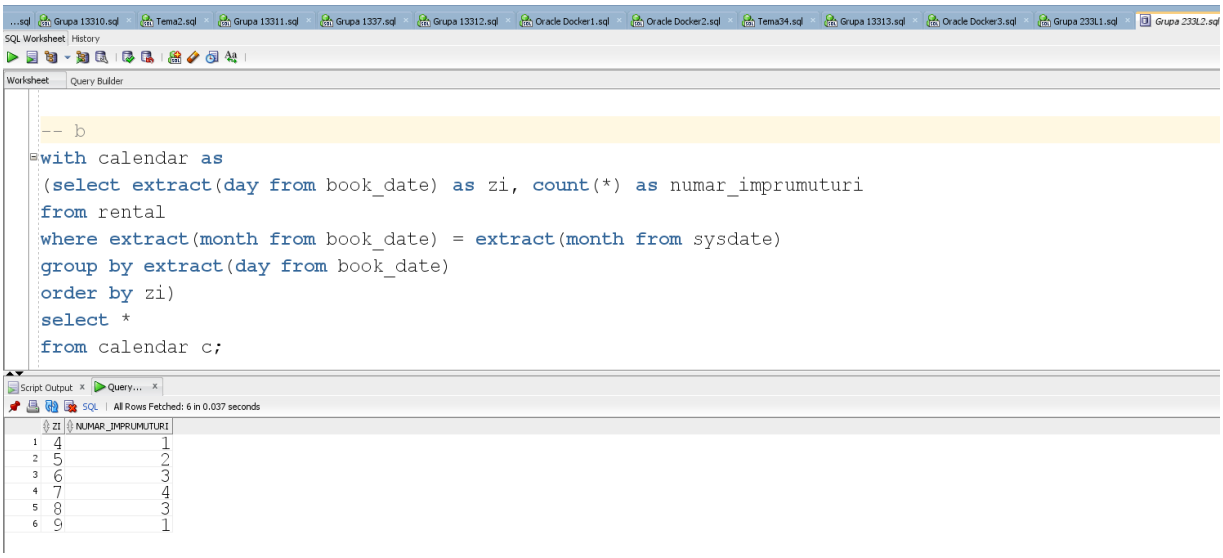

a. Se iau în considerare doar primele 2 zile din lună.

```
select nvl(to_number(to_char(book_date, 'DD')), ziua) zi, count(book_date) numar_imprumuturi
from rental, calendar_eis
where ziua in (2, 3) and ziua = to_number(to_char(book_date(+), 'DD'))
group by book_date, ziua;
```



b. Se iau în considerare doar zilele din lună în care au fost efectuate împrumuturi.

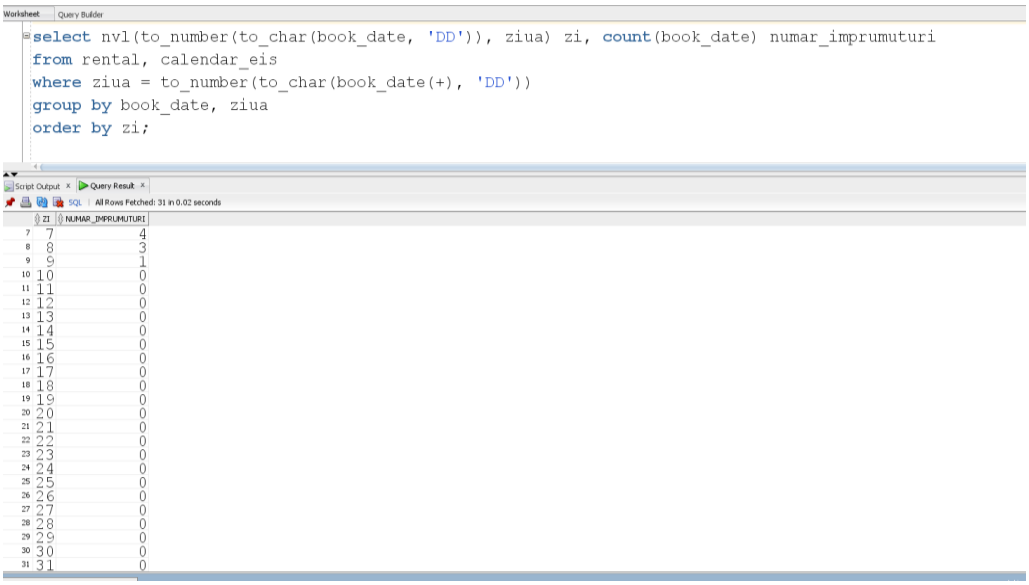
```
with calendar as
(select extract(day from book_date) as zi, count(*) as numar_imprumuturi
from rental
where extract(month from book_date) = extract(month from sysdate)
group by extract(day from book_date)
order by zi)
select *
from calendar c;
```



```
-- b
with calendar as
(select extract(day from book_date) as zi, count(*) as numar_imprumuturi
from rental
where extract(month from book_date) = extract(month from sysdate)
group by extract(day from book_date)
order by zi)
select *
from calendar c;
```

	ZI	NUMAR_IMPRUMUTURI
1	4	1
2	5	2
3	6	3
4	7	4
5	8	3
6	9	1

c. Se iau în considerare toate zilele din lună, incluzând în rezultat și zilele în care nu au fost efectuate împrumuturi.



```
select nvl(to_number(to_char(book_date, 'DD')), ziua) zi, count(book_date) numar_imprumuturi
from rental, calendar_eis
where ziua = to_number(to_char(book_date(+), 'DD'))
group by book_date, ziua
order by zi;
```

	ZI	NUMAR_IMPRUMUTURI
7	7	4
8	8	3
9	9	1
10	10	0
11	11	0
12	12	0
13	13	0
14	14	0
15	15	0
16	16	0
17	17	0
18	18	0
19	19	0
20	20	0
21	21	0
22	22	0
23	23	0
24	24	0
25	25	0
26	26	0
27	27	0
28	28	0
29	29	0
30	30	0
31	31	0

```
select nvl(to_number(to_char(book_date, 'DD')), ziua) zi, count(book_date) numar_imprumuturi
from rental, calendar_eis
where ziua = to_number(to_char(book_date(+), 'DD'))
group by book_date, ziua
order by zi;
```