קורס: 'מערכות קבצים ומסדי נתונים'

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מסמכים נלווים - פרויקט תכנות

Queries – SQL

Employee - actions

-- 1

```
select book.name, inventory.count from book left join inventory on
book.book_id = inventory.book_id where name='Robinson Crusoe' And
inventory.count>0;
```

-- 2

```
select concat(first_name, " ", last_name) as name from customer order
by date_created limit 1;
```

-- 3

```
select book.* from book inner join inventory on book.book_id =
inventory.book_id where inventory.count > 0 order by time_stamp limit
1;
```

-- 4

```
select * from reservation inner join reservation_book on
reservation.reservation_id = reservation_book.reservation_id inner join
book on book.book_id = reservation_book.book_id

inner join customer c on c.customer_id = reservation.customer_id order
by time_stamp;
```

-- 5

```
select book.name, sum(inventory.sold_counter) as sold_books_amount
from book left join inventory on book.book_id = inventory.book_id
where book.name='Clarissa';
```

-- 6

```
select a.first_name, a.last_name from author a, purchase_customer pc,
purchase_customer_book pcb, author_book ab where pc.purchase_id =
pcb.purchase_id AND pcb.book_id = ab.book_id AND a.author_id =
ab.author_id

AND pc.purchase_date between '2018-08-05' and '2020-08-05' group by
a.author_id order by count(*) desc limit 1;
```

-- 7

```
select customer.first_name, customer.last_name from customer inner
join purchase_customer on customer.customer_id =
purchase_customer.customer_id group by customer.customer_id order
by count(*) desc limit 3;
```

-- 8

```
select count(b.name) as translations_amount,b.name from book b inner
join inventory i on b.book_id = i.book_id

inner join book_edition be on b.book_id = be.book_id where
be.translator IS NOT NULL

group by b.name order by count(b.name) desc limit 1 ;
```

-- 9

```
select book.name, pc.purchase_date, pcb.price, pc.purchase_id from
book, purchase_customer pc, purchase_customer_book pcb, customer c
where c.customer_id = pc.customer_id AND pc.purchase_id =
pcb.purchase_id AND book.book_id = pcb.book_id  AND
c.customer_id='5' order by pc.purchase_date;
```

-- 10

```
select book.name, rb.count, reservation.time_stamp, inventory.*, pcb.*,
pc.purchase_date from customer inner join reservation on
customer.customer_id = reservation.customer_id
```

```
        inner join reservation_book rb on rb.reservation_id =
reservation.reservation_id
        inner join book on book.book_id = rb.book_id
        left join inventory on inventory.book_id = book.book_id
   left join purchase_customer_book pcb on pcb.book_id = book.book_id
   left join purchase_customer pc on pc.purchase_id = pcb.purchase_id
AND pc.customer_id = customer.customer_id
   where customer.customer_id = 1
   order by reservation.time_stamp;



-- 11
select sum((d.price * book.weight)+pcb.price) from purchase_customer
pc
inner join deliveries d on pc.purchase_id = d.purchase_id
inner join purchase_customer_book pcb on pcb.purchase_id =
pc.purchase_id
inner join book on book.book_id = pcb.book_id where pc.purchase_id =
2;


-- 12
select * from deliveries d left join purchase_customer pc  on
pc.purchase_id = d.purchase_id
 where pc.customer_id = '2' and d.purchase_id in
(select d.purchase_id from deliveries d  group by d.purchase_id having
count(d.purchase_id)>1)
 order by d.purchase_id;
```

```
-- 13

select d.status from deliveries d, purchase_customer pc where
d.purchase_id = pc.purchase_id And d.purchase_id=2; -- inner join
deliveries on deliveries.delivery_id = purchase_customer.delivery_id
where delivery_id = 1;


-- 14

select sum((d.price * book.weight)) from purchase_customer pc

inner join deliveries d on pc.purchase_id = d.purchase_id

inner join purchase_customer_book pcb on pcb.purchase_id =
pc.purchase_id

inner join book on book.book_id = pcb.book_id

 inner join delivery_company dc on dc.company_id =
d.delivery_company

 where dc.company_name = 'Xpress' AND month(d.delivery_date) = 8
AND year(d.delivery_date) = 2020;
```

Additional actions

```
-- search book by name

select * from book b, inventory i where b.book_id = i.book_id AND
b.name = 'Single for the Summer';


-- search by author name

SELECT  b.book_id,  b.name,

  GROUP_CONCAT(CONCAT(a.first_name,' ' , a.last_name)) AS
author_names,

  GROUP_CONCAT(a.author_id) as author_ids

FROM book b

LEFT JOIN author_book ab ON b.book_id = ab.book_id

LEFT JOIN author a ON ab.author_id = a.author_id

WHERE a.first_name= 'Laurence'

GROUP BY b.book_id;


-- search customer

select  * from customer c where c.customer_id = 1;


-- search purchase id

select * from purchase_customer pc where pc.purchase_id = 2 ;
```

Manager - actions

-- 15

```
select sum(pcb.price) from purchase_customer pc inner join
purchase_customer_book pcb on pc.purchase_id = pcb.purchase_id
where pc.payment_method='bit' AND month(pc.purchase_date) = 7
AND year(pc.purchase_date) = 2020;
```

-- 16

```
select pcb.purchase_id,sum(pcb.price) as sum_purchase,
pc.purchase_date from purchase_customer pc,
purchase_customer_book pcb where

pc.purchase_id = pcb.purchase_id AND pc.purchase_date>'2018-08-01'
group by pc.purchase_date having sum_purchase>

(select avg(pcb.price) as annual_avg from purchase_customer pc inner
join purchase_customer_book pcb

where pc.purchase_id=pcb.purchase_id AND pc.purchase_date>'2018-
08-01');
```

-- 17

```
select count(*), dc.company_name from deliveries d, delivery_company
dc where dc.company_id = d.delivery_company AND
d.delivery_date>'2019-06-02' group by dc.company_name;
```

-- 18

```
select d.*, d.deliveries_id, b.name from deliveries d

inner join deliveries_books db on d.deliveries_id = db.deliveries_id

inner join book b on db.book_id = b.book_id

group by d.deliveries_id, b.name having count(*)>=2;
```

-- 19

```
select c.*, pc.purchase_date from purchase_customer pc, customer c

where pc.customer_id = c.customer_id AND pc.purchase_date<'2018-07-27' and c.customer_id NOT IN

(select c.customer_id from purchase_customer pc, customer c

where pc.customer_id = c.customer_id AND pc.purchase_date>'2018-07-27') group by c.customer_id;


-- 20


SELECT column_name FROM information_schema.columns

WHERE table_schema = 'book_store' AND table_name = 'customer ';

                        select c.*,r.contact_customer from customer c, reservation r, reservation_book rb

        where r.customer_id = c.customer_id AND rb.reservation_id = r.reservation_id AND r.contact_customer

        IS NOT NULL and r.contact_customer <= curdate() - 14 AND

        NOT EXISTS( select * from purchase_customer pc, purchase_customer_book pcb

        where pc.purchase_id = pcb.purchase_id AND pc.customer_id = c.customer_id AND pcb.book_id = rb.book_id);


-- 21

select sum(i2.count) as AccumelatedNoOfBooks,month(i1.time_stamp),year(i1.time_stamp)

from inventory i1

join inventory i2 on month(i2.time_stamp) <=month(i1.time_stamp) and year(i2.time_stamp)<=year(i1.time_stamp) and i2.location=i1.location

where i1.location = 'storage' and i1.count>0 and i2.location='storage' and i2.count>0 and i2.time_stamp<=i1.time_stamp and month(i2.time_stamp) <=month(i1.time_stamp) and year(i2.time_stamp)<=year(i1.time_stamp)
```

```
group by month(i1.time_stamp),year(i1.time_stamp) order by
month(i1.time_stamp),year(i1.time_stamp);



-- 22A

select count(*) as books_bought_by_store,
sum(ps.count*ps.book_price) as books_payment from purchase_store
ps where ps.purchase_date between '2008-01-01' and '2020-01-29';


-- 22B

select sum(pcb.price)-sum(ps.count*ps.book_price) as revenue,

month(pc.purchase_date) as month, year(pc.purchase_date) as year

from purchase_customer pc, purchase_customer_book pcb,
purchase_store ps

where pcb.purchase_id = pc.purchase_id AND
month(pc.purchase_date)= 8 AND year(pc.purchase_date)=2020;


-- 23

select avg(pcb.price), year(pc.purchase_date) from purchase_customer
pc inner join purchase_customer_book pcb where
pc.purchase_id=pcb.purchase_id group by year(pc.purchase_date) order
by year(pc.purchase_date);


-- 24

select wmh.hour_payment*wmh.hours from working_month_hours
wmh inner join employees e on e.employee_id = wmh.employee_id
where e.employee_id=1 AND wmh.month = 6 AND wmh.year = 2018;


-- 25

select e.first_name, e.last_name from employees e inner join
purchase_customer pc on e.employee_id = pc.employee_id where
```

```
month(pc.purchase_date)= 7  AND year(pc.purchase_date) = 2020 group
by e.employee_id order by count(*) desc limit 1;
```