

# **HomeWork 4**

**Khawaja Ehsun Ul Hawak**

**21301284**

**CSE370 Lab**

**Section 04**

### Task 1:

select customer.customer\_name, loan.loan\_number from ((loan inner join borrower on loan.loan\_number = borrower.loan\_number) inner join customer on borrower.customer\_id = customer.customer\_id) where loan.branch\_name = 'Downtown' ;

```
mysql> select customer.customer_name, loan.loan_number from ((loan inner join borrower on loan.loan_number = borrower.loan_number) inner join customer on borrower.customer_id = customer.customer_id) where loan.branch_name = 'Downtown' ;
```

customer_name	loan_number
Johnson	L-14
Jones	L-17
Williams	L-17

```
3 rows in set (0.01 sec)
```

### Task 2:

select c1.customer\_name as Customer1, c2.customer\_name as Customer2, c1.customer\_city as City from customer c1 inner join customer c2 on c1.customer\_city = c2.customer\_city and c1.customer\_id != c2.customer\_id;

```
mysql> select c1.customer_name as Customer1, c2.customer_name as Customer2, c1.customer_city as City from customer c1 inner join customer c2 on c1.customer_city = c2.customer_city and c1.customer_id != c2.customer_id;
```

Customer1	Customer2	City
Hayes	Jones	Harrison
Curry	Smith	Rye
Jones	Hayes	Harrison
Smith	Curry	Rye
Adams	Lindsay	Pittsfield
Green	Turner	Stamford
Lindsay	Adams	Pittsfield
Turner	Green	Stamford

```
8 rows in set (0.01 sec)
```

### Task 3:

select branch\_name, sum(balance)\*0.04 as Total\_Interest from account group by branch\_name;

```
mysql> select branch_name, sum(balance)*0.04 as Total_Interest from account group by branch_name;
```

branch_name	Total_Interest
Downtown	20.00
Perryridge	16.00
Brighton	66.00
Mianus	28.00
Redwood	28.00
Round Hill	14.00

```
6 rows in set (0.01 sec)
```

#### Task 4:

select account\_number from account a1 where not exists(select \* from account a2 where a2.balance > a1.balance and a1.branch\_name = a2.branch\_name);

```
mysql> select account_number from account a1 where not exists(select * from account a2 where a2.balance > a1.balance and a1.branch_name = a2.branch_name);
```

account_number
A-101
A-102
A-201
A-215
A-222
A-305

```
6 rows in set (0.00 sec)
```

#### Task 5:

select loan.loan\_number as loan\_number, amount as loan\_amount, customer.customer\_name as customer\_name from ((borrower inner join customer on borrower.customer\_id = customer.customer\_id) inner join loan on loan.loan\_number = borrower.loan\_number) order by amount, loan.loan\_number desc limit 5;

```
mysql> select loan.loan_number as loan_number, amount as loan_amount, customer.customer_name as customer_name from ((borrower inner join customer on borrower.customer_id = customer.customer_id) inner join loan on loan.loan_number = borrower.loan_number) order by amount, loan.loan_number desc limit 5;
```

loan_number	loan_amount	customer_name
L-93	500	Curry
L-11	900	Smith
L-17	1000	Jones
L-17	1000	Williams
L-16	1300	Adams

```
5 rows in set (0.00 sec)
```

#### Task 6:

select customer.customer\_name from (((depositor inner join account on depositor.account\_number = account.account\_number) inner join borrower on depositor.customer\_id = borrower.customer\_id) inner join loan on loan.loan\_number = borrower.loan\_number) inner join customer on customer.customer\_id = borrower.customer\_id where loan.branch\_name = account.branch\_name and loan.branch\_name = 'Perryridge' ;

```
mysql> select customer.customer_name from (((depositor inner join account on depositor.account_number = account.account_number) inner join borrower on depositor.customer_id = borrower.customer_id) inner join loan on loan.loan_number = borrower.loan_number) inner join customer on customer.customer_id = borrower.customer_id where loan.branch_name = account.branch_name and loan.branch_name = 'Perryridge' ;
```

customer_name
Hayes

```
1 row in set (0.00 sec)
```

### Task 7:

select customer\_name, count(\*) as total\_loan from borrower inner join customer on  
borrower.customer\_id = customer.customer\_id group by borrower.customer\_id having total\_loan >  
1 ;

```
mysql> select customer_name, count(*) as total_loan from borrower inner join customer on borrower.customer_id = customer.customer_id group by borrower.customer_id having total_loan > 1 ;
```

customer_name	total_loan
Smith	2

```
1 row in set (0.00 sec)
```