

1. Obtain information (editor id, editor first name, editor last name) of the editors who have edited the book whose ISBNCode is '8330418998'.

```
select e.eid, e.fname, e.lname
from Editor as e, Edited_by as eb
where eb.isbn = '8330418998' and e.eid = eb.eid;
```

```
mysql> select e.eid, e.fname, e.lname
-> from Editor as e, Edited_by as eb
-> where eb.isbn = '8330418998' and e.eid = eb.eid;
+-----+-----+-----+
| eid | fname | lname |
+-----+-----+-----+
| 0000 | John  | Taylor |
+-----+-----+-----+
1 row in set (0.00 sec)
```

2. Retrieve the customers' names who bought novels. Order the result in the descending order of customer name. (Book type is novel).

```
select c.name
from Customer as c, Orders as o, Order_book as ob, Book as b
where c.cid = o.cid and o.oid = ob.oid and ob.isbn = b.isbn and b.btype = 'novel'
order by c.name desc;
```

```
mysql> select c.name
-> from Customer as c, Orders as o, Order_book as ob, Book as b
-> where c.cid = o.cid and o.oid = ob.oid and ob.isbn = b.isbn and b.btype = 'novel'
-> order by c.name desc;
+-----+
| name |
+-----+
| Alice Kay |
+-----+
1 row in set (0.00 sec)
```

3. Get all publishers information (publisher name, address) which have published textbooks. If a publisher published more than one book, list the publisher only once in your result.

```

select p.name, p.address
from Publisher as p, Book as b
where b.btype = 'textbook' and p.pid = b.pid
group by p.name;

```

```

mysql> select p.name, p.address
      -> from Publisher as p, Book as b
      -> where b.btype = 'textbook' and p.pid = b.pid
      -> group by p.name;
+-----+-----+
| name | address |
+-----+-----+
| Mor  | address1 |
+-----+-----+
1 row in set (0.01 sec)

```

4. Retrieve the author Id, author's first name, author's last name, and number of novel books written, if an author has written more than 2 novel books. Both sole-authoring and co-authoring activities should be considered as writing a book.

```

select a.aid, a.fname, a.lname, count(*)
from Author as a, Written_by as wb, Book as b
where a.aid = wb.aid and wb.isbn = b.isbn and b.btype = 'novel'
group by a.aid, a.fname, a.lname;

```

```

mysql> select a.aid, a.fname, a.lname, count(*)
      -> from Author as a, Written_by as wb, Book as b
      -> where a.aid = wb.aid and wb.isbn = b.isbn and b.btype = 'novel'
      -> group by a.aid, a.fname, a.lname;
+-----+-----+-----+-----+
| aid | fname | lname | count(*) |
+-----+-----+-----+-----+
| 5655 | Jeff  | Smith |          2 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

5. Get authors information (first name, last name) who has written the book 'Fundamentals of Database Systems'.

```
select a.fname, a.lname
```

```
from Author as a, Written_by as wb, Book as b
```

```
where b.title = 'Fundamentals of Database Systems' and wb.isbn = b.isbn and a.aid = wb.aid;
```

```
mysql> select a.fname, a.lname
-> from Author as a, Written_by as wb, Book as b
-> where b.title = 'Fundamentals of Database Systems' and wb.isbn = b.isbn and a.aid = wb.aid;
+-----+-----+
| fname | lname |
+-----+-----+
| Jeff  | Smith |
+-----+-----+
1 row in set (0.00 sec)
```

6. Get the books information (title, type and ISBN) written by author 'Jeff Smith'.

```
select b.title, b.btype, b.isbn
```

```
from Book as b, Author as a, Written_by as wb
```

```
where a.fname = 'Jeff' and a.lname = 'Smith' and wb.aid = a.aid and wb.isbn = b.isbn;
```

```
mysql> select b.title, b.btype, b.isbn
-> from Book as b, Author as a, Written_by as wb
-> where a.fname = 'Jeff' and a.lname = 'Smith' and wb.aid = a.aid and wb.isbn = b.isbn;
+-----+-----+-----+
| title                                | btype  | isbn      |
+-----+-----+-----+
| Fundamentals of Database Systems    | textbook | 2477392103 |
| Maze Runner                        | novel   | 7452721431 |
| Hunger Game                        | novel   | 8330418998 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

7. Get information (publisher id, publisher name, phone) about publishers who have published more than 2 novels.

```
select p.pid, p.name, p.phone
```

```
from Publisher as p, Book as b
```

```
where b.btype = 'novel' and b.pid = p.pid
```

```
group by p.pid
```

```
having count(*) > 2;
```

```
mysql> select p.pid, p.name, p.phone
-> from Publisher as p, Book as b
-> where b.btype = 'novel' and b.pid = p.pid
-> group by p.pid
-> having count(*) > 2;
+-----+-----+-----+
| pid      | name | phone      |
+-----+-----+-----+
| 0000000000 | Mor  | 1234567890 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

8. Obtain the highest price of the books that are written by author “Jeff Smith”. List the price.

```
select max(b.price) as price
```

```
from Book as b, Written_by as wb, Author as a
```

```
where a.fname = 'Jeff' and a.lname = 'Smith' and a.aid = wb.aid and wb.isbn = b.isbn;
```

```
mysql> select max(b.price) as price
-> from Book as b, Written_by as wb, Author as a
-> where a.fname = 'Jeff' and a.lname = 'Smith' and a.aid = wb.aid and wb.isbn = b.isbn;
+-----+
| price |
+-----+
| 40.72 |
+-----+
1 row in set (0.00 sec)
```

9. List the editor Id and number of books edited, if the editor has edited more than 2 books. Both sole-editing and co-editing activities should be considered as editing a book.

```
select e.eid, count(*) as count
```

```
from Editor as e, Edited_by as eb
```

```
where eb.eid = e.eid
```

```
group by e.eid;
```

```
mysql> select e.eid, count(*) as count
-> from Editor as e, Edited_by as eb
-> where eb.eid = e.eid
-> group by e.eid;
+-----+-----+
| eid  | count |
+-----+-----+
| 0000 |      1 |
| 4072 |      2 |
+-----+-----+
2 rows in set (0.00 sec)
```

10. List all orders (order_id, order date) that ordered by customer named “Alice Kay”;

```
select o.oid, o.order_date
from Orders as o, Customer as c
where c.name = 'Alice Kay' and o.cid = c.cid;
```

```
mysql> select o.oid, o.order_date
-> from Orders as o, Customer as c
-> where c.name = 'Alice Kay' and o.cid = c.cid;
+-----+-----+
| oid      | order_date |
+-----+-----+
| 123568358 | 2019-11-11 |
| 347692345 | 2019-07-11 |
| 745262711 | 2019-08-20 |
+-----+-----+
3 rows in set (0.00 sec)
```

11. List all books (ISBN, title, price) that are ordered by customer named “Alice Kay”. If she ordered the same book more than once or more than one copy, please only display the book once in the result. Order the result by book title in ascending order.

```
select b.isbn, b.title, b.price
from Book as b, Orders as o, Customer as c, Order_book as ob
where c.name = 'Alice Kay' and o.cid = c.cid and o.oid = ob.oid and ob.isbn = b.isbn
```

group by b.isbn

order by b.title desc;

```
mysql> select b.isbn, b.title, b.price
-> from Book as b, Orders as o, Customer as c, Order_book as ob
-> where c.name = 'Alice Kay' and o.cid = c.cid and o.oid = ob.oid and ob.isbn = b.isbn
-> group by b.isbn
-> order by b.title desc;
+-----+-----+-----+
| isbn      | title                                | price |
+-----+-----+-----+
| 8330418998 | Hunger Game                        | 40.72 |
| 2477392103 | Fundamentals of Database Systems | 34.56 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

12. List all the orders (order_no, order date) that include “Fundamentals of Database Systems”.

select o.oid, o.order_date

from Orders as o, Order_book as ob, Book as b

where b.title = 'Fundamentals of Database Systems' and ob.isbn = b.isbn and o.oid = ob.oid;

```
mysql> select o.oid, o.order_date
-> from Orders as o, Order_book as ob, Book as b
-> where b.title = 'Fundamentals of Database Systems' and ob.isbn = b.isbn and o.oid = ob.oid;
+-----+-----+
| oid      | order_date |
+-----+-----+
| 347692345 | 2019-07-11 |
| 745262711 | 2019-08-20 |
+-----+-----+
2 rows in set (0.00 sec)
```

13. List how many orders are placed before “2019-08-11”.

select count(*) as count

from Orders as o

where o.order_date < '2019-08-11';

```
mysql> select count(*) as count
-> from Orders as o
-> where o.order_date < '2019-08-11';
+-----+
| count |
+-----+
|      1 |
+-----+
1 row in set (0.01 sec)
```

14. For customers who had made more than 2 orders so far, list customer Id, customer name, and number of orders that the customer has made.

```
select c.cid, c.name, count(*) as count
from Customer as c, Orders as o
where o.cid = c.cid
group by c.cid
having count(*) > 2;
```

```
mysql> select c.cid, c.name, count(*) as count
-> from Customer as c, Orders as o
-> where o.cid = c.cid
-> group by c.cid
-> having count(*) > 2;
+-----+-----+-----+
| cid      | name      | count |
+-----+-----+-----+
| 111111111 | Alice Kay |      3 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

15. Retrieve book (or books) that has(have) the highest price among all books.
Please list book title and price.

```
select title, price
from Book
where (
    select max(price)
```

from Book
)= price;

```
mysql> select title, price
-> from Book
-> where (
->     select max(price)
->     from Book
-> ) = price;
+-----+-----+
| title      | price |
+-----+-----+
| Maze Runner | 40.72 |
| Hunger Game | 40.72 |
+-----+-----+
2 rows in set (0.00 sec)
```