

Book Dealer DB

BOOK DEALER DB

AUTHOR

Author_id	Name	City	Country
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PUBLISHER

Publisher_id	Name	City	Country
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CATALOG

book_id	title	author_id	publisher_id	category_id	year	price
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CATEGORY

category id	description
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ORDER DETAILS

order_no	book_id	quantity
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Queries Used to CREATE and INSERT

```
create table author(author_id int,name varchar(10),city
varchar(10),country varchar(10),primary key(author_id));
create table publisher(publisher_id int,name varchar(10),city
varchar(10),country varchar(10),primary key(publisher_id));
create table category(category_id int,description varchar(10),primary
key(category_id));
create table catalog(book_id int,title varchar(10),author_id
int,publisher_id int,category_id int,year int,price int,primary
key(book_id),foreign key(author_id) references author(author_id),foreign
key(publisher_id) references publisher(publisher_id),foreign
key(category_id) references category(category_id));
create table order_details(order_no int,book_id int,quantity int,primary
key(order_no,book_id),foreign key(book_id) references catalog(book_id));
```

```
insert into author values(1001,'Vikas','Bangalore','India');
insert into author values(1002,'Ben','Kerala','India');
insert into author values(1003,'John','Bangkok','Singapore');
insert into author values(1004,'Livy','Helsinki','Finland');
insert into author values(1005,'Centi','LA','USA');

insert into publisher values(2001,'Luis','LA','USA');
insert into publisher values(2002,'veta','Helsinki','USA');
insert into publisher values(2003,'thing','Bangkok','USA');
insert into publisher values(2004,'scolastic','Stipples','USA');
insert into publisher values(2005,'DnB','Bangalore','USA');

insert into category values(3001,'Horror');
insert into category values(3002,'Fiction');
insert into category values(3003,'Love');
insert into category values(3004,'Intellect');
insert into category values(3005,'Edu');

insert into catalog values(4001,'Abc',1001,2002,3002,2010,1000);
insert into catalog values(4002,'Pqr',1003,2002,3001,2012,500);
insert into catalog values(4003,'Xyz',1004,2003,3003,2011,2000);
insert into catalog values(4004,'Sdf',1005,2005,3004,2014,500);
insert into catalog values(4005,'Jkl',1002,2004,3001,2015,400);
insert into catalog values(4006,'Jdl',1001,2003,3002,2010,3000);
insert into catalog values(4007,'Lmn',1001,2004,3002,2010,3000);
insert into catalog values(4008,'Cee',1003,2002,3001,2010,2500);
insert into catalog values(4009,'Jee',1003,2004,3001,2010,3000);
insert into catalog values(4010,'Qee',1003,2002,3001,2010,4000);
insert into catalog values(4011,'Abc',1001,2002,3004,2010,3500);
insert into catalog values(4012,'Abc',1001,2002,3004,2010,3500);

insert into order_details values(5001,4002,4);
insert into order_details values(5002,4001,2);
insert into order_details values(5003,4003,1);
insert into order_details values(5004,4004,3);
insert into order_details values(5005,4003,4);
```

WEBSITE USED FOR MYSQL

Link : <http://sqlfiddle.com/>

Queries

1. Create the above tables by properly specifying the primary keys and foreign keys.

```
create table author(author_id int,name varchar(10),city
varchar(10),country varchar(10),primary key(author_id));
create table publisher(publisher_id int,name varchar(10),city
varchar(10),country varchar(10),primary key(publisher_id));
create table category(category_id int,description varchar(10),primary
key(category_id));
create table catalog(book_id int,title varchar(10),author_id
int,publisher_id int,category_id int,year int,price int,primary
key(book_id),foreign key(author_id) references author(author_id),foreign
key(publisher_id) references publisher(publisher_id),foreign
key(category_id) references category(category_id));
create table order_details(order_no int,book_id int,quantity int,primary
key(order_no,book_id),foreign key(book_id) references catalog(book_id));
```

2. Enter at least five tuples for each relation.

```
insert into author values(1001,'Vikas','Bangalore','India');
insert into author values(1002,'Ben','Kerala','India');
insert into author values(1003,'John','Bangkok','Singapore');
insert into author values(1004,'Livy','Helsinki','Finland');
insert into author values(1005,'Centi','LA','USA');

insert into publisher values(2001,'Luis','LA','USA');
insert into publisher values(2002,'veta','Helsinki','USA');
insert into publisher values(2003,'thing','Bangkok','USA');
insert into publisher values(2004,'scolastic','Stipples','USA');
insert into publisher values(2005,'DnB','Bangalore','USA');

insert into category values(3001,'Horror');
```

```

insert into category values(3002,'Fiction');
insert into category values(3003,'Love');
insert into category values(3004,'Intellect');
insert into category values(3005,'Edu');

insert into catalog values(4001,'Abc',1001,2002,3002,2010,1000);
insert into catalog values(4002,'Pqr',1003,2002,3001,2012,500);
insert into catalog values(4003,'Xyz',1004,2003,3003,2011,2000);
insert into catalog values(4004,'Sdf',1005,2005,3004,2014,500);
insert into catalog values(4005,'Jkl',1002,2004,3001,2015,400);
insert into catalog values(4006,'Jdl',1001,2003,3002,2010,3000);
insert into catalog values(4007,'Lmn',1001,2004,3002,2010,3000);
insert into catalog values(4008,'Cee',1003,2002,3001,2010,2500);
insert into catalog values(4009,'Jee',1003,2004,3001,2010,3000);
insert into catalog values(4010,'Qee',1003,2002,3001,2010,4000);
insert into catalog values(4011,'Abc',1001,2002,3004,2010,3500);
insert into catalog values(4012,'Abc',1001,2002,3004,2010,3500);

insert into order_details values(5001,4002,4);
insert into order_details values(5002,4001,2);
insert into order_details values(5003,4003,1);
insert into order_details values(5004,4004,3);
insert into order_details values(5005,4003,4);

```

3. Give the details of the authors who have 2 or more books in the catalog and the price of the books is greater than the average price of the books in the catalog and the year of publication is after 2000.

```

select distinct author_id ,count(*) from catalog
where year = 2010 and price > (select avg(price) from catalog)
group by author_id having count(*) > 2;

select avg(price) from catalog; //Average price

```

author_id	count (*)
1001	3

author_id	count (*)
1003	3

avg(price)
2127

4. Find the author of the book that has maximum sales.

```
select name, author_id from author
where author_id in
(select author_id from catalog
where book_id in (select book_id from order_details group by book_id
having sum(quantity) =
(select top 1 sum(quantity) from order_details
group by book_id order by sum(quantity) desc)));
```

name	author_id
Livy	1004

5. Demonstrate how you increase the price of books published by a specific publisher by 10%.

```
update catalog
set price = price + price*0.1;
```

Before

price
1000
500
2000
500

price
400
3000
3000
2500
3000
4000
3500
3500

After

price
1100
550
2200
550
440
3300
3300
2750
3300
4400
3850
3850
