

```
1 • create database book_dealer;
2 • show databases;
3 • use book_dealer;
4 • show tables;
5 • create table author(
6     author_id int,
7     name varchar(20),
8     city varchar(20),
9     country varchar(20),
10    primary key(author_id));
11 • create table publisher(
12     publisher_id int,
13     name varchar(20),
14     city varchar(20),
15     country varchar(20),
16    primary key(publisher_id));
17 • create table catalog(
18     price int,
19     book_id int,
20     title varchar(30),
21     author_id int,
22     publisher_id int,
23     category_id int,
```

```
22 publisher_id int,
23 category_id int,
24 year int,
25 primary key(book_id),
26 foreign key(author_id) references author(author_id),
27 foreign key(publisher_id) references publisher(publisher_id),
28 foreign key(category_id) references category(category_id));
29 • ⊖ create table category(
30     category_id int,
31     description varchar(30),
32     primary key(category_id));
33 • ⊖ create table order_details(
34     order_no int,
35     book_id int,
36     quantity int,
37     primary key(order_no),
38     foreign key(book_id) references catalog(book_id));
39 • insert into author values (1001,'TERAS CHAN','CA','USA');
40 • insert into author values (1002,'STEVENS','ZOMBI','UGANDA');
41 • insert into author values (1003,'M MANO','CAIR','CANADA');
42 • insert into author values (1004,'KARTHIK B.P.','NEW YORK','USA');
43 • insert into author values (1005,'WILLIAM STALLINGS','LAS VEGAS','USA');
44 • commit;
```

```
43 • insert into author values (1005,'WILLIAM STALLINGS','LAS VEGAS','USA');
44 • commit;
45 • select * from author;
46 • insert into publisher values (1,'PEARSON','NEW YORK','USA');
47 • insert into publisher values (2,'EEE','NEW SOUTH WALES','USA');
48 • insert into publisher values (3,'PHI','DELHI','INDIA');
49 • insert into publisher values (4,'WILLEY','BERLIN','GERMANY');
50 • insert into publisher values (5,'MGH','NEW YORK','USA');
51 • commit;
52 • select * from publisher;
53 • insert into catalog values (251,11,'Unix System Prg',1001,1,1001,2000);
54 • insert into catalog values (425,12,'Digital Signals',1002,2,1003,2001);
55 • insert into catalog values (225,13,'Logic Design',1003,3,1002,1999);
56 • insert into catalog values (333,14,'Server Prg',1004,4,1004,2001);
57 • insert into catalog values (326,15,'Linux OS',1005,5,1005,2003);
58 • insert into catalog values (526,16,'C++ Bible',1005,5,1001,2000);
59 • insert into catalog values (658,17,'COBOL Handbook',1005,4,1001,2000);
60 • commit;
61 • select * from catalog;
62 • insert into category values (1001,'COMPUTER SCIENCE');
63 • insert into category values (1002,'ALGORITHM DESIGN');
64 • insert into category values (1003,'ELECTRONICS');
65 • insert into category values (1004,'PROGRAMMING');
```

```
64 • insert into category values (1003,'ELECTRONICS');
65 • insert into category values (1004,'PROGRAMMING');
66 • insert into category values (1005,'OPERATING SYSTEMS');
67 • commit;
68 • select * from category;
69 • insert into order_details values (1,11,5);
70 • insert into order_details values (2,12,8);
71 • insert into order_details values (3,13,15);
72 • insert into order_details values (4,14,22);
73 • insert into order_details values (5,15,3);
74 • insert into order_details values (6,17,10);
75 • commit;
76 • select * from order_details;
77 • select count(*) from author where author_authorid in(select author_id from catalog where year>2000 and price>2000);
78 • select title,price,1.10*price as new_price from CATALOG;
79 • select name,city,country from AUTHOR join CATALOG ON author-id=author-id where year>2000;
80
81 • select avg(price) from catalog;
82 • select title,price from CATALOG where price<500;
83 • select title,price from CATALOG where price between 400 and 500;
84 • select title,year from catalog where year>2000;
85 • select title,price from CATALOG where price!=(select max(price)from CATALOG);
86 • select name,country from author where country='CANADA';
```

```
75 • commit;
76 • select * from order_details;
77 • select count(*) from author where author_authorid in(select author_id from catalog where year>2000 and price>2000);
78 • select title,price,1.10*price as new_price from CATALOG;
79 • select name,city,country from AUTHOR join CATALOG ON author-id=author-id where year>2000;
80
81 • select avg(price) from catalog;
82 • select title,price from CATALOG where price<500;
83 • select title,price from CATALOG where price between 400 and 500;
84 • select title,year from catalog where year>2000;
85 • select title,price from CATALOG where price!=(select max(price)from CATALOG);
86 • select name,country from author where country='CANADA';
87 • select author_id,name,city,country from author
88 • where author_id in(select author_id from catalog
89 • where year=2000 group by author_id having count(author_id) >=2 );
90 • select a.name from author a,catalog c,order_details o
91 • where a.author_id=c.author_id and c.book_id=o.book_id
92 • and o.quantity=(select max(quantity) from order_details);
93 • select name from author a,catalog c where a.author_id=c.author_id and book_id in
94 • (select book_id from order_details where quantity=(select max(quantity) from order_details));
95
96
```



```
45 • select * from author;
46 • insert into publisher values (1, 'PEARSON', 'NEW YORK', 'USA');
```

Result Grid  Filter Rows: Edit:    Export/Import:   Wrap Cell Content: 

	author_id	name	city	country
▶	1001	TERAS CHAN	CA	USA
	1002	STEVENS	ZOMBI	UGANDA
	1003	M MANO	CAIR	CANADA
	1004	KARTHIK B.P.	NEW YORK	USA
	1005	WILLIAM STALLINGS	LAS VEGAS	USA
*	NULL	NULL	NULL	NULL

 Result Grid

 Form Editor

 Field Types

 Query Stats

author 29 x

Apply

Revert

```
45 • select * from author;
46 • insert into publisher values (1, 'PEARSON', 'NEW YORK', 'USA');
```

Result Grid  Filter Rows: Edit:    Export/Import:   Wrap Cell Content: 

	author_id	name	city	country
▶	1001	TERAS CHAN	CA	USA
	1002	STEVENS	ZOMBI	UGANDA
	1003	M MANO	CAIR	CANADA
	1004	KARTHIK B.P.	NEW YORK	USA
	1005	WILLIAM STALLINGS	LAS VEGAS	USA
*	NULL	NULL	NULL	NULL

 Result Grid

 Form Editor

 Field Types






 Query Stats

author 29 x

Apply

Revert


```
52 • select * from publisher;
53 • insert into catalog values (251,11,'Unix System Prg',1001,1,1001,2000);
```


Result Grid  Filter Rows: Edit:    Export/Import:   Wrap Cell Content: 

	publisher_id	name	city	country
▶	1	PEARSON	NEW YORK	USA
	2	EEE	NEW SOUTH VALES	USA
	3	PHI	DELHI	INDIA
	4	WILLEY	BERLIN	GERMANY
	5	MGH	NEW YORK	USA
•	NULL	NULL	NULL	NULL

 Result Grid

 Form Editor

 Field Types

 Query Stats

publisher 30 x

Apply

Revert


```
61 • select * from catalog;
62 • insert into category values (1001, 'COMPUTER SCIENCE');
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	price	book_id	title	author_id	publisher_id	category_id	year
▶	251	11	Unix System Prg	1001	1	1001	2000
	425	12	Digital Signals	1002	2	1003	2001
	225	13	Logic Design	1003	3	1002	1999
	333	14	Server Prg	1004	4	1004	2001
	326	15	Linux OS	1005	5	1005	2003
	526	16	C++ Bible	1005	5	1001	2000
	658	17	COBOL Handbook	1005	4	1001	2000
•	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid

Form Editor

Field Types

Query Stats

catalog 31 x

Apply

Revert


```
68 • select * from category;
69 • insert into order_details values (1,11,5);
```

Result Grid  Filter Rows: Edit:    Export/Import:   Wrap Cell Content: 

	category_id	description
▶	1001	COMPUTER SCIENCE
	1002	ALGORITHM DESIGN
	1003	ELECTRONICS
	1004	PROGRAMMING
	1005	OPERATING SYSTEMS
•	NULL	NULL

 Result Grid

 Form Editor

 Field Types

 Query Stats

category 32 x

Apply

Revert

76 • `select * from order_details;`

77 • `select count(*) from author where author_authorid in(select author_id from catalog where year>2000 and price>2000);`

Result Grid  Filter Rows:

Edit: 

Export/Import:  

Wrap Cell Content: 



Result Grid



Form Editor



Field Types



Query Stats



Apply

Revert

	order_no	book-id	quantity
▶	1	11	5
	2	12	8
	3	13	15
	4	14	22
	5	15	3
	6	17	10
★	NULL	NULL	NULL

order_details 33 x

```
78 • select title,price,1.10*price as new_price from CATALOG;
79 • select name,city,country from AUTHOR join CATALOG ON author-id=author-id where year>2000;
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	title	price	new_price
▶	Unix System Prg	251	276.10
	Digital Signals	425	467.50
	Logic Design	225	247.50
	Server Prg	333	366.30
	Linux OS	326	358.60
	C++ Bible	526	578.60
	COBOL Handbook	658	723.80



Result
Grid



Form
Editor




Field
Types



Query
Stats




Result 34 x


 Read Only

```
81 • select avg(price) from catalog;
82 • select title,price from CATALOG where price<500;
```


Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	avg(price)
▶	392.0000



Result
Grid


Form
Editor


Field
Types


Query
Stats

Result 35 x

 Read Only

```
82 • select title,price from CATALOG where price<500;
83 • select title,price from CATALOG where price between 400 and 500;
```

Result Grid  Filter Rows: Export:  Wrap Cell Content: 

	title	price
▶	Unix System Prg	251
	Digital Signals	425
	Logic Design	225
	Server Prg	333
	Linux OS	326



Result
Grid



Form
Editor



Field
Types



Query
Stats




```
83 • select title,price from CATALOG where price between 400 and 500;
84 • select title,year from catalog where year>2000;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	title	price
▶	Digital Signals	425

Result Grid

Form Editor

Field Types


Query Stats

```
84 • select title,year from catalog where year>2000;
85 • select title,price from CATALOG where price!=(select max(price)from CATALOG);
```


Result Grid  Filter Rows: Export:  Wrap Cell Content: 

	title	year
▶	Digital Signals	2001
	Server Prg	2001
	Linux OS	2003

 Result Grid


 Form Editor

 Field Types

 Query Stats



catalog 38 x

 Read Only

```
85 • select title,price from CATALOG where price!=(select max(price)from CATALOG);
86 • select name,country from author where country='CANADA';
```

Result Grid

 Filter Rows:

Export: 

Wrap Cell Content: 

	title	price
▶	Unix System Prg	251
	Digital Signals	425
	Logic Design	225
	Server Prg	333
	Linux OS	326
	C++ Bible	526

 Result Grid

 Form Editor

 Field Types

 Query Stats



```
86 • select name,country from author where country='CANADA';
```

```
87 • select author_id,name,city,country from author
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	name	country
▶	M MANO	CANADA



Result
Grid


Form
Editor


Field
Types


Query
Stats

author 40 x

 Read Only

```
89 where year=2000 group by author_id having count(author_id) >=2 );
90 • select a.name from author a,catalog c,order_details o
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	author_id	name	city	country
▶	1005	WILLIAM STALLINGS	LAS VEGAS	USA
★	NULL	NULL	NULL	NULL



Result Grid



Form Editor



Field Types



Query Stats



author 41 x





Apply

Revert

```

90 • select a.name from author a,catalog c,order_details o
91     where a.author_id=c.author_id and c.book_id=o.book_id
92     and o.quantity=(select max(quantity) from order_details);
93 • select name from author a,catalog c where a.author_id=c.author_id and book_id in
94     (select book_id from order_details where quantity=(select max(quantity) from order_details));
95

```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	name
▶	TERAS CHAN
	STEVENS
	M MANO
	KARTHIK B.P.
	WILLIAM STALLINGS
	WILLIAM STALLINGS
	WILLIAM STALLINGS

Result Grid

Form Editor

Field Types

Query Stats

Result 42 x

Read Only