

```
\\1 create and drop
mysql> CREATE DATABASE library;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> drop database library;
Query OK, 0 rows affected (0.07 sec)
output
```

```
mysql> show databases;
+-----+
| Database |
+-----+
| library  |
| movie    |
| mysql    |
| performance_schema |
| record   |
| std      |
| student  |
| students |
| sys      |
+-----+
25 rows in set (0.00 sec)
```

```
mysql> use library;
Database changed
\\2 create table
queries
```

```
mysql> CREATE TABLE book (book_id int(10),title varchar(20), language_id int(10),
mrp bigint(10), published_id int(10), published_date date, volume int(10), status
varchar(10),PRIMARY KEY (book_id));
Query OK, 0 rows affected (0.28 sec)
```

```
mysql> CREATE TABLE author (author_id int(10) primary key,name varchar(20),email
varchar(20),phono int(20),status varchar(20));
Query OK, 0 rows affected (0.29 sec)
```

```
mysql> CREATE TABLE book_author (book_id int(10),author_id int(10),CONSTRAINT
COMP_NAME PRIMARY KEY (book_id,author_id));
Query OK, 0 rows affected (0.27 sec)
```

```
mysql> CREATE TABLE publisher (publisher_id int(10) primary key,name
varchar(20),address varchar(10));
Query OK, 0 rows affected (0.29 sec)
```

```
mysql> CREATE TABLE member(member_id int(10) primary key,name
varchar(20),branch_code int(10),roll_no int(10),email varchar(20),date_of_join
date,status varchar(20));
Query OK, 0 rows affected (0.27 sec)
```

```
mysql> CREATE TABLE book_issue (issue_id int(10) primary key,date_of_join
date,book_id int(20),member_id int(20),expected_date_of_return date);
Query OK, 0 rows affected (0.28 sec)
```

```
mysql> CREATE TABLE book_return (issue_id int(10) primary
key,actual_date_of_return date ,tae_days date,late_fee int(10));
Query OK, 0 rows affected (0.28 sec)
```

```
mysql> CREATE TABLE language (lang_id int(10) primary key,name varchar(20));
Query OK, 0 rows affected (0.27 sec)
```

```
mysql> CREATE TABLE late_fee_rule (from_days int(10),to_days int,amount
int(10),CONSTRAINT COMP1_NAME PRIMARY KEY (from_days,to_days,amount));
Query OK, 0 rows affected (0.29 sec)
```

```
mysql> ALTER TABLE book ADD CONSTRAINT c1 FOREIGN KEY(published_id) REFERENCES
publisher(publisher_id);
Query OK, 0 rows affected (0.80 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE book ADD CONSTRAINT c2 FOREIGN KEY(language_id) REFERENCES
language(lang_id);
Query OK, 0 rows affected (0.89 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

output

```
mysql> desc book
-> ;
```

Field	Type	Null	Key	Default	Extra
book_id	int(10)	NO	PRI	NULL	
title	varchar(20)	YES		NULL	
language_id	int(10)	YES	MUL	NULL	
mrp	bigint(10)	YES		NULL	
published_id	int(10)	YES	MUL	NULL	
published_date	date	YES		NULL	
volume	int(10)	YES		NULL	
status	varchar(10)	YES		NULL	

8 rows in set (0.00 sec)

```
mysql> desc author;
```

Field	Type	Null	Key	Default	Extra
author_id	int(10)	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
email	varchar(20)	YES		NULL	
phono	int(20)	YES		NULL	
status	varchar(20)	YES		NULL	

5 rows in set (0.00 sec)

```
mysql> desc book_author;
```

Field	Type	Null	Key	Default	Extra
book_id	int(10)	NO	PRI	NULL	
author_id	int(10)	NO	PRI	NULL	

2 rows in set (0.00 sec)

```
mysql> desc publisher;
```

Field	Type	Null	Key	Default	Extra
publisher_id	int(10)	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
address	varchar(10)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> desc member;
```

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

```

| member_id | int(10) | NO | PRI | NULL | |
| name      | varchar(20) | YES | | NULL | |
| branch_code | int(10) | YES | | NULL | |
| roll_no   | int(10) | YES | | NULL | |
| email     | varchar(20) | YES | | NULL | |
| date_of_join | date | YES | | NULL | |
| status    | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> desc book_issue
-> ;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| issue_id | int(10) | NO | PRI | NULL | |
| date_of_join | date | YES | | NULL | |
| book_id | int(20) | YES | MUL | NULL | |
| member_id | int(20) | YES | MUL | NULL | |
| expected_date_of_return | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

```

mysql> desc book_issue
-> ;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| issue_id | int(10) | NO | PRI | NULL | |
| date_of_join | date | YES | | NULL | |
| book_id | int(20) | YES | MUL | NULL | |
| member_id | int(20) | YES | MUL | NULL | |
| expected_date_of_return | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

```

mysql> desc book_issue
-> ;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| issue_id | int(10) | NO | PRI | NULL | |
| date_of_join | date | YES | | NULL | |
| book_id | int(20) | YES | MUL | NULL | |
| member_id | int(20) | YES | MUL | NULL | |
| expected_date_of_return | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

```

mysql> desc late_fee_rule;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| from_days | int(10) | NO | PRI | NULL | |
| to_days | int(11) | NO | PRI | NULL | |
| amount | int(10) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

//3 dropping table with foreign key
queris
mysql> DROP TABLE language;

```

ERROR 1217 (23000): Cannot delete or update a parent row: a foreign key constraint fails

//3 dropping table without foreign key

mysql> DROP table

book;

Query OK, 0 rows affected (0.16 sec)

//4 alter command without data

mysql> ALTER TABLE book ADD pageno int(20);

Query OK, 0 rows affected (0.58 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc book;

Field	Type	Null	Key	Default	Extra
book_id	int(10)	NO	PRI	NULL	
title	varchar(20)	YES		NULL	
language_id	int(10)	YES	MUL	NULL	
mrp	bigint(10)	YES		NULL	
published_id	int(10)	YES	MUL	NULL	
published_date	date	YES		NULL	
volume	int(10)	YES		NULL	
status	varchar(10)	YES		NULL	
pageno	int(20)	YES		NULL	

9 rows in set (0.00 sec)

mysql> ALTER TABLE book drop column pageno;

Query OK, 0 rows affected (0.61 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc book;

Field	Type	Null	Key	Default	Extra
book_id	int(10)	NO	PRI	NULL	
title	varchar(20)	YES		NULL	
language_id	int(10)	YES	MUL	NULL	
mrp	bigint(10)	YES		NULL	
published_id	int(10)	YES	MUL	NULL	
published_date	date	YES		NULL	
volume	int(10)	YES		NULL	
status	varchar(10)	YES		NULL	

8 rows in set (0.00 sec)

\\4 alter command with data

mysql> ALTER TABLE language ADD pageno int(20);

Query OK, 0 rows affected (0.72 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc language;

Field	Type	Null	Key	Default	Extra
lang_id	int(10)	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
pageno	int(20)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> select * from language
-> ;
```

lang_id	name	pageno
1	nibin	NULL
2	ashwin	NULL

2 rows in set (0.00 sec)

```
mysql> insert into language values(3,'bibin',22);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select * from language
-> ;
```

lang_id	name	pageno
1	nibin	NULL
2	ashwin	NULL
3	bibin	22

3 rows in set (0.00 sec)

```
mysql> ALTER TABLE language drop column pageno;
Query OK, 0 rows affected (0.66 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from language
-> ;
```

```
-----4 alter command without data-----+
| lang_id | name |
+-----+
| 1 | nibin |
| 2 | ashwin |
| 3 | bibin |
+-----+
```

3 rows in set (0.00 sec)

```
mysql>
```