

```
mysql> CREATE DATABASE libDB;
Query OK, 1 row affected (0.207 sec)
```

```
mysql> USE libDB;
Database changed
```

```
mysql> CREATE TABLE Authors(author_id INT PRIMARY KEY, name VARCHAR(20) NOT NULL, nationality VARCHAR(30));
Query OK, 0 rows affected (0.364 sec)
```

```
mysql> DESCRIBE Authors;
```

Field	Type	Null	Key	Default	Extra
author_id	int	NO	PRI	NULL	
name	varchar(20)	NO		NULL	
nationality	varchar(30)	YES		NULL	

```
3 rows in set (0.193 sec)
```

```
mysql> CREATE TABLE Books(book_id INT PRIMARY KEY, title VARCHAR(30), published_year YEAR, author_id INT NOT NULL, FOREIGN KEY (author_id) REFERENCES Authors(author_id));
Query OK, 0 rows affected (0.756 sec)
```

```
mysql> DESCRIBE Books;
```

Field	Type	Null	Key	Default	Extra
book_id	int	NO	PRI	NULL	
title	varchar(30)	YES		NULL	
published_year	year	YES		NULL	
author_id	int	NO	MUL	NULL	

```
4 rows in set (0.040 sec)
```

```
mysql> CREATE TABLE Members(member_id INT PRIMARY KEY, name VARCHAR(30) NOT NULL, email VARCHAR(40) UNIQUE, phone VARCHAR(15), join_date DATE NOT NULL);
```

```
Query OK, 0 rows affected (0.535 sec)
```

```
mysql> DESCRIBE Members;
```

Field	Type	Null	Key	Default	Extra
member_id	int	NO	PRI	NULL	
name	varchar(30)	NO		NULL	
email	varchar(40)	YES	UNI	NULL	
phone	varchar(15)	YES		NULL	
join_date	date	NO		NULL	

```
5 rows in set (0.040 sec)
```

```
mysql> CREATE TABLE Borrowing(borrow_id INT PRIMARY KEY, book_id INT NOT NULL, member_id INT NOT NULL, borrow_date DATE NOT NULL, return_date DATE, FOREIGN KEY (book_id) REFERENCES Books(book_id), FOREIGN KEY (member_id) REFERENCES Members(member_id));
Query OK, 0 rows affected (0.842 sec)
```

```
mysql> DESCRIBE Borrowing;
```

Field	Type	Null	Key	Default	Extra
borrow_id	int	NO	PRI	NULL	
book_id	int	NO	MUL	NULL	
member_id	int	NO	MUL	NULL	
borrow_date	date	NO		NULL	
return_date	date	YES		NULL	

```
5 rows in set (0.042 sec)
```

```
mysql> CREATE TABLE Fines(fine_id INT PRIMARY KEY, borrow_id INT NOT NULL, amount DECIMAL(7,2) NOT NULL, paid BOOLEAN DEFAULT FALSE, FOREIGN KEY (borrow_id) REFERENCES Borrowing(borrow_id));
Query OK, 0 rows affected (0.590 sec)
```

```
mysql> DESCRIBE fines;
```

Field	Type	Null	Key	Default	Extra
fine_id	int	NO	PRI	NULL	
borrow_id	int	NO	MUL	NULL	
amount	decimal(7,2)	NO		NULL	
paid	tinyint(1)	YES		0	

```
4 rows in set (0.039 sec)
```

