

به نام خدا

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```
CREATE TABLE book (book_id INT NOT NULL PRIMARY KEY,  
title VARCHAR(40) NOT NULL,  
publisher_name VARCHAR(40) NOT NULL,  
FOREIGN KEY(publisher_name) REFERENCES publisher(name) on delete set  
null on update set cascade);
```

```
CREATE TABLE book_authors (  
book_id INT NOT NULL PRIMARY KEY,  
author_name VARCHAR(30) NOT NULL UNIQUE,  
FOREIGN KEY(book_id) REFERENCES book(book_id) on delete cascade on  
update cascade );
```



```
CREATE TABLE publisher (
```

```
name VARCHAR(40) NOT NULL PRIMARY KEY,
```

```
address VARCHAR(90),
```

```
phone VARCHAR(11));
```

```
CREATE TABLE book_copies (
```

```
book_id INT NOT NULL UNIQUE PRIMARY KEY,
```

```
branch_id INT NOT NULL UNIQUE,
```

```
no_of_copies INT NOT NULL,
```

```
FOREIGN KEY(book_id) REFERENCES book(book_id),
```

```
FOREIGN KEY(branch_id) REFERENCES library_branch(branch_id) on delete  
set null on update cascade);
```

```
CREATE TABLE book_loans (
```

```
book_id INT NOT NULL UNIQUE PRIMARY KEY,
```

```
branch_id INT NOT NULL,
```

```
date_out DATETIME NOT NULL,
```

```
due_date DATE NOT NULL,
```



```
card_no INT NOT NULL,
```

```
FOREIGN KEY(branch_id) REFERENCES library_branch(branch_id),
```

```
FOREIGN KEY(book_id) REFERENCES book(book_id),
```

```
FOREIGN KEY(card_no) REFERENCES borrower(card_no) on delete set null  
on update set cascade);
```

```
CREATE TABLE library_branch (
```

```
branch_id INT NOT NULL PRIMARY KEY,
```

```
branch_name VARCHAR(40) NOT NULL,
```

```
address VARCHAR(90) NOT NULL);
```

```
CREATE TABLE borrower (
```

```
card_no INT NOT NULL PRIMARY KEY,
```

```
name VARCHAR(40) NOT NULL,
```

```
address VARCHAR(90),
```

```
phone VARCHAR(11));
```