**MINI PROJECT**

**BOOK CATALOG SYSTEM**

**Creating Databases :**

**Create database book\_catalog;**

**Use book\_catalog;**

**1.Creating categories table:**

create table categories (category\_id int primary key,category\_name varchar(255) unique not null);

insert into categories values(101,'category1');

insert into categories values(102,'category2');

insert into categories values(103,'category3');

insert into categories values(104,'category4');

**To see output:**

**Select \* from categories;**

**Result :**

|  |  |
| --- | --- |
| **category\_id** | **category\_name** |
| 101 | category1 |
| 102 | category2 |
| 103 | category3 |
| 104 | category4 |

**2. Creating Publisher table:**

create table publishers(publisher\_id int primary key,publisher\_name varchar(255) not null);

insert into publishers values(101,'publisher1');

insert into publishers values(102,'publisher2');

insert into publishers values(103,'publisher3');

insert into publishers values(104,'publisher4');

**To see output :**

**Select \* from publishers;**

**Result :**

|  |  |
| --- | --- |
| **publisher\_id** | **publisher\_name** |
| 101 | publisher1 |
| 102 | publisher2 |
| 103 | publisher3 |
| 104 | publisher4 |

**3.Creating Books table :**

create table books(book\_id int primary key,

title varchar(255) not null,

isbn varchar(30) unique not null,

publication\_year int not null,

publisher\_id int,

category\_id int,

author\_name varchar(255) check (author\_name!=''),

foreign key (publisher\_id) references publishers(publisher\_id) on delete cascade,

foreign key (category\_id) references categories(category\_id) on delete cascade);

insert into books values(1,'title1',"2345",2022,101,101,'pavan');

insert into books values(2,'title1',"2346",2023,102,102,'pavan1');

insert into books values(3,'title1',"2347",2024,103,103,'pavan2');

insert into books values(4,'title1',"2348",2025,104,104,'pavan3');

**To see output :**

**Select \* from books;**

**Result :**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **book\_id** | **title** | **isbn** | **publication\_year** | **publisher\_id** | **category\_id** | **author\_name** |
| 1 | title1 | 2345 | 2023 | 101 | 101 | pavan |
| 2 | title1 | 2346 | 2023 | 102 | 102 | pavan1 |
| 3 | title1 | 2347 | 2024 | 103 | 103 | pavan2 |
| 4 | title1 | 2348 | 2025 | 104 | 104 | pavan3 |

**4.Creating User table :**

create table users(user\_id int primary key,

user\_name varchar(255) not null,

email varchar(255) unique not null,

phone\_number int unique not null);

insert into users values(1,'pavankalyan','pavan@gmail.com',1234567890);

insert into users values(2,'pavankalyan2','pavan2@gmail.com',1234567891);

insert into users values(3,'pavankalyan3','pavan3@gmail.com',1234567892);

insert into users values(4,'pavankalyan4','pavan4@gmail.com',1234567893);

**To see output :**

**Select \* from users;**

**Result :**

|  |  |  |  |
| --- | --- | --- | --- |
| **user\_id** | **user\_name** | **email** | **phone\_number** |
| 1 | pavankalyan | [pavan@gmail.com](mailto:pavan@gmail.com) | 1234567890 |
| 2 | pavankalyan2 | [pavan2@gmail.com](mailto:pavan2@gmail.com) | 1234567891 |
| 3 | pavankalyan3 | [pavan3@gmail.com](mailto:pavan3@gmail.com) | 1234567892 |
| 4 | pavankalyan4 | [pavan4@gmail.com](mailto:pavan4@gmail.com) | 1234567893 |

**5.Creating Borrowings table :**

create table borrowings(borrow\_id int primary key,

user\_id int,

book\_id int,

borrow\_date int not null,

return\_date int not null,

foreign key (user\_id) references users(user\_id) on delete cascade,

foreign key (book\_id) references books(book\_id) on delete cascade);

insert into borrowings values(2001,1,1,24,30);

insert into borrowings values(2002,2,2,25,31);

insert into borrowings values(2003,3,3,26,32);

insert into borrowings values(2004,3,4,27,33);

**To see output :**

**Select \* from borrowings ;**

**Result :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **borrow\_id** | **user\_id** | **book\_id** | **borrow\_date** | **return\_date** |
| 2001 | 1 | 1 | 24 | 30 |
| 2002 | 2 | 2 | 25 | 31 |
| 2003 | 3 | 3 | 26 | 32 |
| 2004 | 3 | 4 | 27 | 33 |

**6. To Fetch all the records :**

**select user\_name,email,phone\_number,title,isbn,category\_name,publisher\_name,publication\_year,author\_name,borrow\_id,**

**borrow\_date,return\_date from books b join publishers p on(b.publisher\_id=p.publisher\_id) join categories c on(b.category\_id=c.category\_id)**

**join borrowings br on(b.book\_id=br.Book\_id) join users u on(br.user\_id=u.user\_id);**

**Output :**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **user\_name** | **email** | **phone\_number** | **title** | **isbn** | **category\_name** | **publisher\_name** | **publication\_year** | **author\_name** | **borrow\_id** | **borrow\_date** | **return\_date** |
| pavankalyan | [pavan@gmail.com](mailto:pavan@gmail.com) | 1234567890 | title1 | 2345 | category1 | publisher1 | 2023 | pavan | 2001 | 24 | 30 |
| pavankalyan2 | [pavan2@gmail.com](mailto:pavan2@gmail.com) | 1234567891 | title1 | 2346 | category2 | publisher2 | 2023 | pavan1 | 2002 | 25 | 31 |
| pavankalyan3 | [pavan3@gmail.com](mailto:pavan3@gmail.com) | 1234567892 | title1 | 2347 | category3 | publisher3 | 2024 | pavan2 | 2003 | 26 | 32 |
| pavankalyan3 | [pavan3@gmail.com](mailto:pavan3@gmail.com) | 1234567892 | title1 | 2348 | category4 | publisher4 | 2025 | pavan3 | 2004 | 27 | 33 |