

Table Creation

1) AUTHOR

CREATE TABLE AUTHOR

| | | |
|------------------------|-------------|-----------|
| (author_ID | VARCHAR(15) | NOT NULL, |
| book_ID | INTEGER(4) | NOT NULL, |
| Fname | VARCHAR(15) | NOT NULL, |
| Lname | VARCHAR(15) | NOT NULL, |
| PRIMARY KEY(authod_ID) | | |
| UNIQUE(authod_ID)); | | |

2)BOOK

CREATE TABLE BOOK

| | | |
|---|--------------|-----------|
| (book_ID | VARCHAR(15) | NOT NULL, |
| author_ID | VARCHAR(15) | NOT NULL, |
| publisher_ID | VARCHAR(15) | NOT NULL, |
| customer_rating | INT, | |
| ISBN | VARCHAR(13), | |
| Price | DECIMAL(3,2) | NOT NULL, |
| Condition | VARCHAR(10), | |
| Title | VARCHAR(50) | NOT NULL, |
| Category | VARCHAR(20) | NOT NULL, |
| Year | INT | NOT NULL, |
| PRIMARY KEY(book_ID), | | |
| FOREIGN KEY(author_ID) REFERENCES AUTHOR(author_ID), | | |
| FOREIGN KEY(publisher_ID) REFERENCES PUBLISHER(publisher_ID)); | | |

3)CUSTOMER

CREATE TABLE CUSTOMER

| | | |
|----------------------------|--------------|-----------|
| (customer_ID | VARCHAR(15) | NOT NULL, |
| Fname | VARCHAR(15) | NOT NULL, |
| Lname | VARCHAR(15) | NOT NULL, |
| street1 | VARCHAR(30) | NOT NULL, |
| street2 | VARCHAR(30), | |
| city | VARCHAR(20) | NOT NULL, |
| country | VARCHAR(15) | NOT NULL, |
| postal | VARCHAR(10) | NOT NULL, |
| email | VARCHAR(18), | |
| PRIMARY KEY(customer_ID)); | | |

4)EMPLOYEE

CREATE TABLE EMPLOYEE

| | | |
|---|--------------|-----------|
| (employee_ID | VARCHAR(15) | NOT NULL, |
| store_ID | VARCHAR(15) | NOT NULL, |
| hours_worked | REAL | NOT NULL, |
| Fname | VARCHAR(15) | NOT NULL, |
| Lname | VARCHAR(15) | NOT NULL, |
| Email | VARCHAR(30), | |
| Phone | VARCHAR(15), | |
| Wage | DECIMAL(2,2) | NOT NULL, |
| PRIMARY KEY(employee_ID), | | |
| FOREIGN KEY(store_ID) REFERENCES STORE(store_ID)); | | |

5) ORDER

CREATE TABLE ORDER

| | | |
|--|--------------|-----------|
| (order_ID | VARCHAR(15) | NOT NULL, |
| customer_ID | VARCHAR(15) | NOT NULL, |
| date | DATE | NOT NULL, |
| shipping | DECIMAL(3,2) | NOT NULL, |
| total | DECIMAL(5,2) | NOT NULL, |
| PRIMARY KEY(order_ID), | | |
| FOREIGN KEY(customer_ID) REFERENCES CUSTOMER(customer_ID)); | | |

6) PUBLISHER

CREATE TABLE PUBLISHER

| | | |
|------------------------------|-------------|-----------|
| (publisher_ID | VARCHAR(15) | NOT NULL, |
| book_ID | VARCHAR(15) | NOT NULL, |
| publisher_name | VARCHAR(30) | NOT NULL, |
| PRIMARY KEY(publisher_ID)); | | |

7) SHIPPING_ADDRESS

CREATE TABLE SHIPPING_ADDRESS

| | | |
|--|--------------|-----------|
| (username | VARCHAR(20) | NOT NULL, |
| Fname | VARCHAR(15) | NOT NULL, |
| Lname | VARCHAR(15) | NOT NULL, |
| street1 | VARCHAR(30) | NOT NULL, |
| street2 | VARCHAR(30), | |
| city | VARCHAR(20) | NOT NULL, |
| country | VARCHAR(15) | NOT NULL, |
| postal | VARCHAR(10) | NOT NULL, |
| PRIMARY KEY(username), | | |
| FOREIGN KEY(username) REFERENCES USER(username)); | | |

8) STORE

CREATE TABLE STORE

| | | |
|---|--------------|-----------|
| (store_ID | VARCHAR(15) | NOT NULL, |
| street1 | VARCHAR(30) | NOT NULL, |
| street2 | VARCHAR(30), | |
| city | VARCHAR(20) | NOT NULL, |
| country | VARCHAR(15) | NOT NULL, |
| postal | VARCHAR(10) | NOT NULL, |
| manager_ID | VARCHAR(15) | NOT NULL, |
| PRIMARY KEY(store_ID), | | |
| FOREIGN KEY(manager_ID) REFERENCES EMPLOYEE(employee_ID)); | | |

9) STORED_IN

CREATE TABLE STORED_IN

| | | |
|---|-------------|-----------|
| (warehouse_ID | VARCHAR(15) | NOT NULL, |
| book_ID | VARCHAR(15) | NOT NULL, |
| FOREIGN KEY(warehouse_ID) REFERENCES WAREHOUSE(warehouse_ID), | | |
| FOREIGN KEY(book_ID) REFERENCES BOOK(book_ID)); | | |

10) USER

CREATE TABLE USER

| | | |
|--|-------------|-----------|
| (username | VARCHAR(20) | NOT NULL, |
| password | VARCHAR(30) | NOT NULL, |
| customer_ID | VARCHAR(15) | NOT NULL, |
| PRIMARY KEY(username), | | |
| FOREIGN KEY(customer_ID) REFERENCES CUSTOMER(customer_ID)); | | |

11) WAREHOUSE

CREATE TABLE WAREHOUSE

| | | |
|--|--------------|-----------|
| (warehouse_ID | VARCHAR(15) | NOT NULL, |
| book_ID | VARCHAR(15) | NOT NULL, |
| street1 | VARCHAR(30) | NOT NULL, |
| street2 | VARCHAR(30), | |
| city | VARCHAR(20) | NOT NULL, |
| country | VARCHAR(15) | NOT NULL, |
| postal | VARCHAR(10) | NOT NULL, |
| PRIMARY KEY(warehouse_ID), | | |
| FOREIGN KEY(book_ID) REFERENCES BOOK(book_ID)); | | |

12) WRITES

CREATE TABLE WRITES

```
(publisher_ID      VARCHAR(15)      NOT NULL,  
book_ID           VARCHAR(15)      NOT NULL,  
FOREIGN KEY(publisher_ID) REFERENCES PUBLISHER(publisher_ID),  
FOREIGN KEY(book_ID) REFERENCES BOOK(book_ID) );
```

13) BUYS

CREATE TABLE BUYS

```
(customer_ID      INTEGER(4)        NOT NULL,  
book_ID           INTEGER(4)        NOT NULL,  
order_ID          INTEGER           NOT NULL DEFAULT 0);
```

14) HAS

CREATE TABLE HAS

```
(user_ID          VARCHAR(20)       NOT NULL,  
username          VARCHAR(20)       NOT NULL,  
FOREIGN KEY(user_ID) REFERENCES USER(username),  
FOREIGN KEY(username) REFERENCES SHIPPING_ADDRESS(username) );
```

15) IN

CREATE TABLE IN

```
(book_ID          VARCHAR(15)       NOT NULL,  
order_ID          VARCHAR(15)       NOT NULL,  
FOREIGN KEY(book_ID) REFERENCES BOOK(book_ID) );
```