```
CREATE table member (
memberID int AUTO_INCREMENT NOT NULL,
PRIMARY KEY (memberID),
MFirst varchar(20) NOT NULL,
MLast varchar(20) NOT NULL,
Street varchar(30),
Snumber int CHECK (Snumber > 0),
PostalCode int CHECK (PostalCode >= 10000 AND PostalCode <=100000),
MBirthDate date
);

CREATE table publisher (
pubName varchar (20) NOT NULL,
PRIMARY KEY (pubname),
estYear int CHECK (estYear >= 1685),
Street varchar(20),
Snumber int CHECK (Snumber > 0),
PostalCode int CHECK (PostalCode >= 10000 AND PostalCode <=100000)
);

CREATE table book(
ISBN varchar(17) NOT NULL,
PRIMARY KEY (ISBN),
Title varchar(40) NOT NULL,
pubyear int CHECK (pubyear >= 1465),
numpages int CHECK (numpages > 0 AND numpages <10000),
pubname varchar(50),
FOREIGN KEY (pubname) REFERENCES publisher(pubname)
ON DELETE CASCADE
ON UPDATE CASCADE
);

CREATE table author (
authorid int PRIMARY KEY NOT NULL AUTO_INCREMENT,
AFirst varchar(20) not null,
ALast varchar(20) not null,
ABirthDate int
);

CREATE table category (
CategoryName varchar(20) NOT NULL,
PRIMARY KEY (CategoryName),
SuperCatName varchar(20),
FOREIGN KEY (SuperCatName) REFERENCES category(CategoryName)
ON DELETE CASCADE
ON UPDATE CASCADE
);
```

```
CREATE table copies (
ISBN varchar(17),
FOREIGN KEY (ISBN) REFERENCES book(ISBN)
ON DELETE CASCADE
ON UPDATE CASCADE,
copyNr int CHECK (copyNr <=100),
shelf int NOT NULL CHECK (shelf > 0 AND shelf < 10000),
PRIMARY KEY (ISBN,copyNr)
);

CREATE table employee (
empID int AUTO_INCREMENT NOT NULL,
PRIMARY KEY (empID),
EFirst varchar(20) not null,
ELast varchar(20) not null,
salary int,
CHECK (salary >=200 AND salary <= 100000)
);

CREATE TABLE permanent_employee (
empID int,
HiringDate int,
FOREIGN KEY (empID) REFERENCES employee(empID)
ON DELETE CASCADE
ON UPDATE CASCADE,
PRIMARY KEY (empID, HiringDate),
CHECK (HiringDate>=1950)
);

CREATE TABLE temporary_employee (
empID int,
ContractNr int,
PRIMARY KEY (empID, ContractNr),
FOREIGN KEY (empID) REFERENCES employee(empID)
ON DELETE CASCADE
ON UPDATE CASCADE

);

CREATE TABLE borrows (
memberID int,
FOREIGN KEY (memberID) REFERENCES member(memberID)
ON DELETE CASCADE
ON UPDATE CASCADE,
ISBN varchar(17),
FOREIGN KEY (ISBN) REFERENCES book(ISBN)
ON DELETE CASCADE
ON UPDATE CASCADE,
```

```
copyNr int,
FOREIGN KEY (ISBN,CopyNr) REFERENCES copies(ISBN,CopyNr)
ON DELETE CASCADE
ON UPDATE CASCADE,
date_of_borrowing date,
date_of_return date,
PRIMARY KEY (memberID,ISBN,CopyNr,date_of_borrowing)
);

CREATE INDEX date_of_borrowing
ON borrows (date_of_borrowing);

CREATE TABLE belongs_to (
ISBN varchar(17),
FOREIGN KEY (ISBN) REFERENCES book(ISBN)
ON DELETE CASCADE
ON UPDATE CASCADE,
categoryName varchar(20),
PRIMARY KEY (ISBN, categoryName),
FOREIGN KEY (categoryName) REFERENCES category(categoryName)
ON DELETE CASCADE
ON UPDATE CASCADE
);

CREATE TABLE reminder (
empID int ,
FOREIGN KEY (empID) REFERENCES employee(empID)
ON DELETE CASCADE
ON UPDATE CASCADE,
memberID int,
FOREIGN KEY (memberID) REFERENCES member(memberID)
ON DELETE CASCADE
ON UPDATE CASCADE,
ISBN varchar(17),
FOREIGN KEY (ISBN) REFERENCES book(ISBN)
ON DELETE CASCADE
ON UPDATE CASCADE,
copyNr int,
FOREIGN KEY (ISBN,CopyNr) REFERENCES copies(ISBN,CopyNr)
ON DELETE CASCADE
ON UPDATE CASCADE,
date_of_borrowing date,
FOREIGN KEY (date_of_borrowing) REFERENCES borrows(date_of_borrowing)
ON DELETE CASCADE
ON UPDATE CASCADE,
date_of_reminder date,
CHECK (copyNr <=100 AND date_of_return>=date_of_borrowing),
```

```
PRIMARY KEY (empID, memberID, ISBN, copyNr, date_of_borrowing,
date_of_reminder)
);

CREATE TABLE written_by (
ISBN varchar(17),
FOREIGN KEY (ISBN) REFERENCES book(ISBN)
ON DELETE CASCADE
ON UPDATE CASCADE,
authorid int AUTO_INCREMENT,
PRIMARY KEY (ISBN, authorID),
FOREIGN KEY (authorid) REFERENCES author(authorid)
ON DELETE CASCADE
ON UPDATE CASCADE
);
```