

1.

```
CREATE TABLE PERSON(  
  PID INT PRIMARY KEY,  
  PNAME VARCHAR(50)  
)
```

2.

```
CREATE TABLE PUBLISHER(  
  PUBLISHERID INT PRIMARY KEY,  
  PUBNAME VARCHAR(50),  
  LOCATION VARCHAR(250)  
)
```

3.

```
CREATE TABLE BRANCH(  
  BID INT PRIMARY KEY,  
  LNAME VARCHAR(50),  
  LOCATION VARCHAR(250)  
)
```

4.

```
CREATE TABLE DOCUMENT(  
  DOCID INT PRIMARY KEY,  
  TITLE VARCHAR(50),  
  PDATE DATE,  
  PUBLISHERID INT FOREIGN KEY REFERENCES PUBLISHER(PUBLISHERID)  
)
```

5.

```
CREATE TABLE READER(  
  RID INT PRIMARY KEY,  
  RTYPE VARCHAR(50),  
  RNAME VARCHAR(50),  
  RADDRESS VARCHAR(250),  
  PHONE_NO VARCHAR(10)  
)
```

6.

```
CREATE TABLE RESERVATION(  
  RES_NO INT PRIMARY KEY,  
  DTIME DATETIME  
)
```

7.

```
CREATE TABLE BORROWING(  
BOR_NO INT PRIMARY KEY,  
BDTIME DATETIME,  
RDTIME DATETIME  
)
```

8.

```
CREATE TABLE BOOK(  
DOCID INT PRIMARY KEY,  
ISBN VARCHAR(10),  
CONSTRAINT FK_BOOK_DOCUMENT FOREIGN KEY (DOCID)  
REFERENCES DOCUMENT(DOCID)  
)
```

9.

```
CREATE TABLE PROCEEDINGS(  
DOCID INT PRIMARY KEY,  
CDATE DATETIME,  
CLOCATION VARCHAR(50),  
CEDITOR VARCHAR(50),  
CONSTRAINT FK_BOOK_DOCUMENT FOREIGN KEY (DOCID)  
REFERENCES DOCUMENT(DOCID)  
)
```

10.

```
CREATE TABLE JOURNAL_VOLUME(  
DOCID INT PRIMARY KEY,  
VOLUMENO INT,  
EDITOR INT,  
CONSTRAINT FK_JV_DOCUMENT FOREIGN KEY (DOCID)  
REFERENCES DOCUMENT(DOCID),  
CONSTRAINT FK_JV_PERSON FOREIGN KEY (EDITOR)  
REFERENCES PERSON(PID)  
)
```

11.

```
CREATE TABLE CHAIRS(  
DOCID INT NOT NULL,  
PID INT NOT NULL,  
CONSTRAINT [PK_CHAIRS] PRIMARY KEY CLUSTERED  
(  
[DOCID] ASC,
```

[PID] ASC

) ON [PRIMARY],

```
CONSTRAINT FK_CHAIRS_PROCEEDING FOREIGN KEY (DOCID)
REFERENCES PROCEEDINGS(DOCID),
CONSTRAINT FK_CHAIRS_PERSON FOREIGN KEY (PID)
REFERENCES PERSON(PID)
)
```

12.

```
CREATE TABLE AUTHORS(
DOCID INT NOT NULL,
PID INT NOT NULL,
CONSTRAINT [PK_AUTHORS] PRIMARY KEY CLUSTERED
(
[DOCID] ASC,
[PID] ASC
) ON [PRIMARY],
```

```
CONSTRAINT FK_AUTHORS_BOOK FOREIGN KEY (DOCID)
REFERENCES BOOK(DOCID),
CONSTRAINT FK_AUTHORS_PERSON FOREIGN KEY (PID)
REFERENCES PERSON(PID)
)
```

13.

```
CREATE TABLE JOURNAL_ISSUE(
DOCID INT NOT NULL,
ISSUE_NO INT NOT NULL,
CONSTRAINT [PK_JI] PRIMARY KEY CLUSTERED
(
[DOCID] ASC,
[ISSUE_NO] ASC
) ON [PRIMARY],
```

```
CONSTRAINT FK_JI_JV FOREIGN KEY (DOCID)
REFERENCES JOURNAL_VOLUME(DOCID)
)
```

14.

```
CREATE TABLE BORROWS(  
BOR_NO INT NOT NULL,  
DOCID INT NOT NULL,  
COPYNO INT NOT NULL,  
BID INT NOT NULL,  
RID INT NOT NULL,  
CONSTRAINT [PK_BORROWS] PRIMARY KEY CLUSTERED  
(  
    [DOCID] ASC,  
    [COPYNO] ASC,  
    [BID] ASC,  
    [BOR_NO] ASC  
) ON [PRIMARY],  
  
CONSTRAINT FK_BORROWS_BORROWING FOREIGN KEY (BOR_NO)  
    REFERENCES BORROWING(BOR_NO),  
CONSTRAINT FK_BORROWS_READER FOREIGN KEY (RID)  
    REFERENCES READER(RID),  
CONSTRAINT FK_BORROWS_COPY2 FOREIGN KEY ([DOCID], [COPYNO], [BID])  
    REFERENCES DBO.[COPY]([DOCID], [COPYNO], [BID]),  
  
)
```

15.

```
CREATE TABLE GEDIT(  
DOCID INT NOT NULL,  
ISSUE_NO INT NOT NULL,  
PID INT NOT NULL  
CONSTRAINT [PK_GEDIT] PRIMARY KEY CLUSTERED  
(  
    [DOCID] ASC,  
    [ISSUE_NO] ASC,  
    [PID] ASC  
) ON [PRIMARY],  
  
CONSTRAINT FK_GEDIT_JI FOREIGN KEY ([DOCID], [ISSUE_NO])  
    REFERENCES DBO.[JOURNAL_ISSUE]([DOCID], [ISSUE_NO]),  
CONSTRAINT FK_GEDIT_PERSON FOREIGN KEY (PID)  
    REFERENCES PERSON(PID)  
)
```

16.

```
CREATE TABLE RESERVES(  
  RID INT NOT NULL,  
  RESERVATION_NO INT NOT NULL,  
  DOCID INT NOT NULL,  
  COPYNO INT NOT NULL,  
  BID INT NOT NULL,  
  
  CONSTRAINT [PK_RESERVES] PRIMARY KEY CLUSTERED  
  (  
    [DOCID] ASC,  
    [COPYNO] ASC,  
    [BID] ASC,  
    [RESERVATION_NO] ASC  
  ) ON [PRIMARY],
```

```
  CONSTRAINT FK_RESERVES_RESERVATION FOREIGN KEY (RESERVATION_NO)  
    REFERENCES RESERVATION(RES_NO),  
  CONSTRAINT FK_RESERVES_READER FOREIGN KEY (RID)  
    REFERENCES READER(RID),  
  CONSTRAINT FK_RESERVES_COPY1 FOREIGN KEY ([DOCID], [COPYNO], [BID])  
    REFERENCES DBO.[COPY]([DOCID], [COPYNO], [BID])  
)
```

17.

```
CREATE TABLE [dbo].[COPY](  
  [DOCID] [int] NOT NULL,  
  [COPYNO] [int] NOT NULL,  
  [BID] [int] NOT NULL,  
  [POSITION] [varchar](6) NULL,  
  CONSTRAINT [PK_COPY] PRIMARY KEY CLUSTERED  
  (  
    [DOCID] ASC,  
    [COPYNO] ASC,  
    [BID] ASC  
  ) WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,  
  ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY =  
  OFF) ON [PRIMARY]  
) ON [PRIMARY]  
GO
```

```
ALTER TABLE [dbo].[COPY] WITH CHECK ADD CONSTRAINT [FK_COPY_BRANCH_COPYNOBID]  
FOREIGN KEY([COPYNO])
```

```
REFERENCES [dbo].[BRANCH] ([BID])  
GO
```

```
ALTER TABLE [dbo].[COPY] CHECK CONSTRAINT [FK_COPY_BRANCH_COPYNOBID]  
GO
```