CREATE TABLE BOOK(ISBN VARCHAR(6) PRIMARY KEY,

TITLE VARCHAR(20),

YEAR INT(4),

PUBLISHERID VARCHAR(4),

PRICE DECIMAL(4,2),

LANGUAGE VARCHAR(20),

CONSTRAINT ICHECK CHECK(SUBSTR(ISBN,1,3)='111' AND SUBSTR(ISBN,4,3) REGEXP '[0-9]'),

CONSTRAINT TCHECK CHECK(LEFT(TITLE,1)=UPPER((LEFT(TITLE,1)))),

CONSTRAINT YCHECK CHECK(YEAR>1999),

CONSTRAINT LCHECK CHECK(LANGUAGE IN("ENGLISH","FRENCH","HINDI")));

ALTER TABLE BOOK ADD FOREIGN KEY(PUBLISHERID) REFERENCES PUBLISHER(PUBLISHERID);

ALTER TABLE BOOK ADD PAGE INT AFTER PUBLISHERID;

ALTER TABLE BOOK MODIFY PRICE DECIMAL(10,2);

ALTER TABLE BOOK MODIFY TITLE VARCHAR(40);

CREATE TABLE AUTHOR(AUTHORID VARCHAR(4) PRIMARY KEY,

NAME VARCHAR(20),

BIRTHDATE DATE,

CONSTRAINT ACHECK CHECK(ASCII(LEFT(AUTHORID,1))=ASCII('A') AND SUBSTR(AUTHORID,2,3) REGEXP '[0-9]'),

CONSTRAINT NCHECK CHECK(LEFT(NAME,1)=UPPER(LEFT(NAME,1))));

ALTER TABLE AUTHOR ADD COLUMN NATIONALITY VARCHAR(20) AFTER BIRTHDATE;

CREATE TABLE PUBLISHER(PUBLISHERID VARCHAR(4) PRIMARY KEY,

PLACE VARCHAR(20),

CONSTRAINT PCHECK CHECK(ASCII(LEFT(PUBLISHERID,1))=ASCII('P')),

CONSTRAINT PLCHECK CHECK(PLACE IN("DELHI","USA","CHINA")));

ALTER TABLE PUBLISHER ADD NAME VARCHAR(20) AFTER PUBLISHERID;

CREATE TABLE WRITES (ISBN VARCHAR(6),AUTHORID VARCHAR(4),

CONSTRAINT PK PRIMARY KEY(ISBN,AUTHORID),

CONSTRAINT FK FOREIGN KEY(ISBN) REFERENCES BOOK(ISBN),

CONSTRAINT FK1 FOREIGN KEY(AUTHORID) REFERENCES AUTHOR(AUTHORID));

INSERT INTO PUBLISHER VALUES('P501','NAROSA','DELHI');

INSERT INTO PUBLISHER VALUES('P203','MCGRAW HILL','CHINA');

INSERT INTO PUBLISHER VALUES('P604','PEARSON','USA');

INSERT INTO PUBLISHER VALUES('P502','PLEASENT','DELHI');

INSERT INTO AUTHOR VALUES('A101','DENNIS RITCHIE','1965/04/12','INDIAN');

INSERT INTO AUTHOR VALUES('A102','DHAMDHERE','1958/01/30','AMERICAN');

INSERT INTO AUTHOR VALUES('A103','RAMEZ ELMASRI','1956/09/16','INDIAN');

INSERT INTO AUTHOR VALUES('A104','HERBERT SCHILDT','1949/06/26','AMERICAN');

INSERT INTO AUTHOR VALUES('A105','THOMAS CARMAN','1948/05/17','INDIAN');

INSERT INTO AUTHOR VALUES('A106','RAGU RAMAKRISHNAN','1961/08/20','INDIAN');

INSERT INTO BOOK VALUES('111245','C Programming',2000,'P501',200,250.50,'English');

INSERT INTO BOOK VALUES('111753','System Software',2005,'P203',350,500.00,'French');

INSERT INTO BOOK VALUES('111467','Database Management',2004,'P604',550,390.50,'English');

INSERT INTO BOOK VALUES('111555','Object Oriented Programming',2001,'P501',345,400.00,'Hindi');

INSERT INTO BOOK VALUES('111654','Data Structures',2004,'P203',530,600.00,'English');

INSERT INTO WRITES VALUES("111245","A101");

INSERT INTO WRITES VALUES("111753","A102");

INSERT INTO WRITES VALUES("111654","A105");

INSERT INTO WRITES VALUES("111467","A103");

INSERT INTO WRITES VALUES("111245","A104");

INSERT INTO WRITES VALUES("111467","A106");

INSERT INTO WRITES VALUES("111467","A101");

INSERT INTO WRITES VALUES("111467","A102");

#QN1

SELECT \* FROM BOOK INNER JOIN PUBLISHER USING(PUBLISHERID);

#QN2

SELECT B.TITLE FROM BOOK B INNER JOIN PUBLISHER P USING(PUBLISHERID) WHERE P.PUBLISHERID="P501" AND B.LANGUAGE="ENGLISH";

#QN3

SELECT A.NAME,COUNT(W.AUTHORID) FROM WRITES W INNER JOIN AUTHOR A

USING (AUTHORID) GROUP BY AUTHORID HAVING COUNT(W.AUTHORID)>1;

#QN4

SELECT B.TITLE FROM BOOK B INNER JOIN PUBLISHER P USING(PUBLISHERID) WHERE P.PLACE="DELHI";

#QN5

CREATE PROCEDURE BK\_COUNT()

BEGIN

DECLARE z\_AUTHORID WRITES.AUTHORID%TYPE;

DECLARE Z\_COUNT INT;

CURSOR CUR\_12 IS SELECT AUTHORID,COUNT(ISBN) FROM WRITES GROUP BY AUTHORID;

BEGIN

OPEN CUR\_12;

LOOP

FETCH CUR\_12 INTO z\_AUTHORID,Z\_COUNT;

EXIT WHEN CUR\_12%NOTFOUND;

INSERT INTO BOOK\_COUNT VALUES(z\_AUTHORID,Z\_COUNT);

END LOOP;

CLOSE CUR\_12;

COMMIT;

END$$