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CSCI 4707

Homework Assignment 2 (part A)

B.

1. a. CREAT TABLE customers (

cusid char(20),

PRIMARY KEY (cusid));

CREATE TABLE products (

pid char (20),

PRIMARY KEY (pid));

CREATE TABLE transactions (

pid char (20),

cusid char (20),

did char (20),

PRIMARY KEY (cusid, pid),

FOREIGN KEY (cusid) REFERENCES customers,

FOREIGN KEY (pid) REFERENCES products);

b. CREAT TABLE customers (

cusid char(20),

PRIMARY KEY (cusid));

CREATE TABLE products (

pid char (20),

PRIMARY KEY (pid));

CREATE TABLE date (

did char (20),

PRIMARY KEY (did));

CREATE TABLE transactions (

cusid char(20),

pid char (20),

did char (20),

PRIMARY KEY (pid, did, cusid),

FOREIGN KEY (did) REFERENCES date,

FOREIGN KEY (pid) REFERENCES products,

FOREIGN KEY (cusid) REFERENCES costomers);

c. CREATE TABLE products (

pid char (20),

PRIMARY KEY (pid));

CREATE TABLE transactions (

cusid CHAR (20),

did CHAR (20) NOT NULL,

pid CHAR (20),

PRIMARY KEY (cusid),

FOREIGN KEY (pid) REFERENCES products);

d. CREATE TABLE products (

pid char (20),

PRIMARY KEY (pid));

CREATE TABLE transactions (

cusid CHAR (20),

did CHAR (20) NOT NULL,

pid CHAR (20) NOT NULL,

PRIMARY KEY (cusid),

FOREIGN KEY (pid) REFERENCES products);

2.

CREATE TABLE publishers (

Pname CHAR (20),

PRIMARY KEY (pname));

CREATE TABLE books\_published (

ISBN CHAR (20),

bname CHAR (20),

pname CHAR (20) NOT NULL,

PRIMARY KEY (ISBN),

FOREIGN KEY (pname) REFERENVES publishers);

CREATE TABLE authors (

aname CHAR (20),

PRIMARY KEY (aname));

CREATE TABLE books\_authors (

ISBN CHAR (20),

bname CHAR (20),

pname CHAR (20) NOT NULL,

PRIMARY KEY (ISBN, aname),

FOREIGN KEY (aname) REFERENCES authors);

CREATE TABLE books (

ISBN CHAR (20),

bname CHAR (20),

PRIMARY KEY (ISBN));

CREATE TABLE categories (

cname CHAR (20),

PRIMARY KEY (cname));

CREATE TABLE belongs\_to (

ISBN CHAR (20),

cname CHAR (20),

PRIMARY KEY (cname, ISBN),

FOREIGN KEY (ISBN) REFERENCES books,

FOREIGN KEY (cname) REFERENCES categories;

CREATE TABLE parent\_of (

parent\_cname CHAR (20),

sub\_cname CHAR (20),

PRIMARY KEY (sub\_name),

FOREIGN KEY (parent\_cname) REFERENCES categories (cname),

FORRIGN KEY (sub\_cname) REFERENCES categories (cname));

3.

CREATE TABLE professors (

SSN CHAR (20),

phone CHAR (20),

salary CHAR (20),

PRIMARY KEY (SSN));

CREATE TABLE Department\_chairs (

DNO CHAR (20),

Budget INTEGER,

dname CHAR (20) NOT NULL,

SSN CHAR (20) NOT NULL,

PRIMARY KEY (DNO),

FOREIGN KEY (SSN) REFERECES professors);

CREATE TABLE grad\_advised (

gname CHAR (20),

SSN CHAR (20),

PRIMARY KEY (gname, SSN),

FOREIGN KEY (SSN) REFERECES professors);

C.

1.

a.

b.

c.

d.

e.

2.

a.

b.

3.