**Question🡺**

Table Schema:

Create Tables with Integrity Constrains:

a) EMP (empno - primary key, empname, salary, deptname - references entries in a deptname of department table with null constraint, bossno - references entries in an empno of emp table with null constraint)

b) DEPARTMENT (deptname - primary key, floor, phone, empno - references entries in an empno of emp table not null)

c) SALES (salesno - primary key, saleqty, itemname -references entries in a itemname of item table with not null constraint, deptname - references entries in a deptname of department table with not null constraint)

d) ITEM (itemname - primary key, itemtype, itemcolor)

**Answer🡺**

create database Employees

use Employees

--creating item table

CREATE TABLE ITEM (

itemname VARCHAR(255) PRIMARY KEY,

itemtype VARCHAR(100),

itemcolor VARCHAR(100)

);

--creating employee table

create table empp (

empno int primary key,

empname varchar(255),

salary decimal(10, 2),

deptname varchar(255),

bossno int

);

--creating department table

create table departmentt (

deptname varchar(255) primary key,

floor varchar(50),

phone varchar(20),

empno int not null

);

--creating slaes table , refering to item and department

CREATE TABLE SALES (

salesno INT PRIMARY KEY,

saleqty INT,

itemname VARCHAR(255) NOT NULL,

deptname VARCHAR(255) NOT NULL

);

--inserting values into emp table

INSERT INTO empp (empno, empname, salary, deptname, bossno) VALUES

(1, 'Alice', 75000, 'Management', NULL),

(2, 'Ned', 45000, 'Marketing', 1),

(3, 'Andrew', 25000, 'Marketing', 2),

(4, 'Clare', 22000, 'Marketing', 2),

(5, 'Todd', 38000, 'Accounting', 1),

(6, 'Nancy', 22000, 'Accounting', 5),

(7, 'Brier', 43000, 'Purchasing', 1),

(8, 'Sarah', 56000, 'Purchasing', 7),

(9, 'Sophile', 35000, 'Personnel', 1),

(10, 'Sanjay', 15000, 'Navigation', 3),

(11, 'Rita', 15000, 'Books', 4),

(12, 'Gigi', 16000, 'Clothes', 4),

(13, 'Maggie', 11000, 'Clothes', 4),

(14, 'Paul', 15000, 'Equipment', 3),

(15, 'James', 15000, 'Equipment', 3),

(16, 'Pat', 15000, 'Furniture', 3),

(17, 'Mark', 15000, 'Recreation', 3);

--inserting into department table

INSERT INTO DEPARTMENTT (deptname, floor, phone, empno) VALUES

('Management', 5, '34', 1),

('Books', 1, '81', 4),

('Clothes', 2, '24', 4),

('Equipment', 3, '57', 3),

('Furniture', 4, '14', 3),

('Navigation', 1, '41', 3),

('Recreation', 2, '29', 4),

('Accounting', 5, '35', 5),

('Purchasing', 5, '36', 7),

('Personnel', 5, '37', 9),

('Marketing', 5, '38', 2);

--adding references (froenkey)

alter table empp

add constraint fk\_deptnam foreign key (deptname)

references departmentt(deptname) on delete set null;

alter table empp

add constraint fk\_bossnokey foreign key (bossno)

references empp(empno) on delete no action;

alter table departmentt

add constraint fk\_empnokey foreign key (empno)

references empp(empno) ;

--insert into items table

INSERT INTO ITEM (itemname, itemtype, itemcolor) VALUES

('Pocket Knife-Nile', 'E', 'Brown'),

('Pocket Knife-Avon', 'E', 'Brown'),

('Compass', 'N', NULL),

('Geo positioning system', 'N', NULL),

('Elephant Polo stick', 'R', 'Bamboo'),

('Camel Saddle', 'R', 'Brown'),

('Sextant', 'N', NULL),

('Map Measure', 'N', NULL);

--inserting into sales table

INSERT INTO SALES (salesno, saleqty, itemname, deptname) VALUES

(101, 2, 'Boots-snake proof', 'Clothes'),

(102, 1, 'Pith Helmet', 'Clothes'),

(103, 1, 'Sextant', 'Navigation'),

(104, 3, 'Hat-polar Explorer', 'Clothes'),

(105, 5, 'Pith Helmet', 'Equipment'),

(106, 2, 'Pocket Knife-Nile', 'Clothes'),

(107, 3, 'Pocket Knife-Nile', 'Recreation'),

(108, 1, 'Compass', 'Navigation'),

(109, 2, 'Geo positioning system', 'Navigation'),

(110, 5, 'Map Measure', 'Navigation'),

(111, 1, 'Geo positioning system', 'Books'),

(112, 1, 'Sextant', 'Books'),

(113, 3, 'Pocket Knife-Nile', 'Books'),

(114, 1, 'Pocket Knife-Nile', 'Navigation'),

(115, 1, 'Pocket Knife-Nile', 'Equipment'),

(116, 1, 'Sextant', 'Clothes'),

(117, 1, 'Pocket Knife-Nile', 'Equipment'),

(118, 1, '', 'Recreation'),

(119, 1, '', 'Furniture'),

(120, 1, 'Pocket Knife-Nile', ''),

(121, 1, 'Exploring in 10 easy lessons', 'Books'),

(122, 1, 'How to win foreign friends', ''),

(123, 1, 'Compass', ''),

(124, 1, 'Pith Helmet', ''),

(125, 1, 'Elephant Polo stick', 'Recreation'),

(126, 1, 'Camel Saddle', 'Recreation');

select \*from empp

select \*from departmentt

select \*from sales

select \* from ITEM