Module 3 assignment:

1. Write a CREATE TABLE statement for the Customer table. Choose data types appropriate for the DBMS used in your course. All columns are required (not null). A NOT NULL constraint is not required for the primary key column as a primary key constraint implies null not allowed.

```
CREATE TABLE Customer
(CustNo VARCHAR(8),
CustName VARCHAR(30) CONSTRAINT CustNameNotNull NOT NULL,
Address VARCHAR(50) CONSTRAINT AddressNotNull NOT NULL,
Internal CHAR(1) CONSTRAINT InternalNotNull NOT NULL,
Contact VARCHAR(35) CONSTRAINT ContractNotNull NOT NULL,
Phone VARCHAR(11) CONSTRAINT CPhoneNotNull NOT NULL,
City VARCHAR(30) CONSTRAINT CityNotNull NOT NULL,
State CHAR(2) CONSTRAINT StateNotNull NOT NULL,
Zip VARCHAR(10) CONSTRAINT ZipNotNull NOT NULL,
CONSTRAINT PKCustomer PRIMARY KEY (CustNo)
);
```

2. Write a CREATE TABLE statement for the Facility table. Choose data types appropriate for the DBMS used in your course. All columns are required (not null). A NOT NULL constraint is not required for the primary key column as a primary key constraint implies null not allowed.

```
CREATE TABLE Facility
(FacNo VARCHAR(8),
FacName VARCHAR(30) CONSTRAINT FacNameNotNull NOT NULL,
CONSTRAINT PKFacility PRIMARY KEY (FacNo));
```

3. Write a CREATE TABLE statement for the Location table. Choose data types appropriate for the DBMS used in your course. LocName column is required (not null). All columns are required (not null). A NOT NULL constraint is not required for the primary key column as a primary key constraint implies null not allowed.

```
CREATE TABLE Location
(LocNo VARCHAR(8),
LocName VARCHAR(30) CONSTRAINT LocNameNotNull NOT NULL,
FacNo VARCHAR(8) CONSTRAINT FacNoFKNotNull NOT NULL,
CONSTRAINT PKLocation PRIMARY KEY (LocNo),
```

CONSTRAINT FKFacNo FOREIGN KEY (FacNo) REFERENCES Facility(FacNo));

4. Employee table

CREATE TABLE Employee

(EmpNo VARCHAR(8),

EmpName VARCHAR(50) CONSTRAINT EmpNameNotNull NOT NULL,

Department VARCHAR(25) CONSTRAINT DepartmentNotNull NOT NULL,

Email VARCHAR(30) CONSTRAINT EmailNotNull NOT NULL,

Phone VARCHAR(10) CONSTRAINT EPhoneNotNull NOT NULL,

CONSTRAINT PKEmployee PRIMARY KEY (EmpNo));

5. ResourceTbl Table

CREATE TABLE ResourceTbl

(ResNo VARCHAR(8),

ResName VARCHAR(30) CONSTRAINT ResNameNotNull NOT NULL,

Rate DECIMAL(2,2) CONSTRAINT RateNotNull NOT NULL,

CONSTRAINT PKResource PRIMARY KEY (ResNo));

6. EventRequest Table

CREATE TABLE EventRequest

(EventNo VARCHAR(8),

DateHeld DATE CONSTRAINT DateheldNotNull NOT NULL,

DateReg DATE CONSTRAINT DateRegNotNull NOT NULL,

DateAuth DATE.

Status VARCHAR(20) CONSTRAINT StatusNotNull NOT NULL,

EstCost DECIMAL(5,2) CONSTRAINT EstCostNotNull NOT NULL,

EstAudience INTEGER CONSTRAINT EstAudienceNotNull NOT NULL,

BudNo VARCHAR(8),

CustNo VARCHAR(8) CONSTRAINT CustNoFKNotNull NOT NULL,

FacNo VARCHAR(8) CONSTRAINT FacNoFKNotNull NOT NULL,

CONSTRAINT ValidStatus CHECK (Status IN ('PENDING', 'DENIED', 'APPROVED')),

CONSTRAINT EstAudience CHECK (EstAudience > 0),

CONSTRAINT PKEventRequest PRIMARY KEY (EventNo),

CONSTRAINT FKCustNo FOREIGN KEY (CustNo) REFERENCES Customer(CustNo),

CONSTRAINT FKFacNo FOREIGN KEY (FacNo) REFERENCES FACILITY (FacNo));

7. EventPlan Table

CREATE TABLE EventPlan

(PlanNo VARCHAR(8),

Notes VARCHAR(50),

WorkDate DATE CONSTRAINT WorkDateNotNull NOT NULL,

Activity VARCHAR(50) CONSTRAINT ActivityNotNull NOT NULL,

EventNo VARCHAR(4) CONSTRAINT EventNoFKNotNull NOT NULL,

EmpNo VARCHAR(8),

CONSTRAINT PKEventPlan PRIMARY KEY (PlanNo),

CONSTRAINT FKEventNo FOREIGN KEY (EventNo) REFERENCES EventRequest (EventNo),

CONSTRAINT FKEmpNo FOREIGN KEY (EmpNo) REFERENCES Employee (EmpNo));

8. EventPlanLine Table

CREATE TABLE EventPlanLine

(PlanNo VARCHAR(8),

LineNo INTEGER CONSTRAINT LineNoNotNull NOT NULL,

TimeStart DATE CONSTRAINT TimeStartNotNull NOT NULL,

TimeEnd DATE CONSTRAINT TimeEndNotNull NOT NULL,

ResourceCnt INTEGER CONSTRAINT ResourceCntNotNull NOT NULL,

LocNo VARCHAR(8) CONSTRAINT LocNoFKNotNull NOT NULL,

ResNo VARCHAR(8) CONSTRAINT ResNoFKNotNull NOT NULL,

CONSTRAINT TimeStartEndRelationship CHECK (TimeStart < TimeEnd),

CONSTRAINT PKEventPlanLine PRIMARY KEY (PlanNo, LineNo),

CONSTRAINT FKPlanNo FOREIGN KEY (PlanNo) REFERENCES EventPlan (PlanNo) ON DELETE CASCADE,

CONSTRAINT FKLocNo FOREIGN KEY (LocNo) REFERENCES Location (LocNo),

CONSTRAINT FKResNo FOREIGN KEY (ResNo) REFERENCES

ResourceTbl(ResNo),);



