create database [University]

CREATE TABLE University

(

U\_id INT NOT NULL,

Name varchar(20),

Address varchar(20),

PRIMARY KEY (U\_id)

)

alter table university add nickname varchar(10)

alter table university add Phone int

alter table university add check (Phone>100000000)

alter table university drop nickname

select \* from university

insert into University values (1,'Arid Agriculter','Shamsabad',0519872931)

insert into University values (2,'Comsats','G11',0519872341)

insert into University values (3,'Nust','G10',0519874563)

insert into University values (4,'Fast','G12',0519878432)

insert into University values (5,'NUML','Markaz',0519843521)

CREATE TABLE Branches

(

B\_id INT NOT NULL,

B\_name Varchar(20),

B\_address Varchar(20),

U\_id INT,

PRIMARY KEY (B\_id),

FOREIGN KEY (U\_id) REFERENCES University(U\_id)

)

alter table branches add nickname varchar(10)

alter table branches add phone int

alter table branches add loc varchar(10)

alter table branches drop nickname

alter table branches drop phone

alter table branches drop loc

select \* from branches

insert into branches values (709,'BIIT','Shamsabad',1)

insert into branches values (710,'BIMS','Shamsabad',1)

insert into branches values (811,'Coms','Chor',2)

insert into branches values (900,'Nan','Goite',3)

insert into branches values (905,'Caps','kurtie',5)

CREATE TABLE Admin

(

AD\_id INT NOT NULL,

Ad\_loc Varchar(20),

U\_id INT,

PRIMARY KEY (AD\_id),

FOREIGN KEY (U\_id) REFERENCES University(U\_id)

)

select \* from admin

insert into admin values (1111,'Up floor',4)

insert into admin values (1112,'Up floor',2)

insert into admin values (1113,'Up floor',3)

insert into admin values (1114,'Up floor',5)

insert into admin values (1115,'Up floor',1)

CREATE TABLE Departments

(

Dep\_id INT NOT NULL,

Dep\_code INT,

Dep\_name Varchar(20),

PRIMARY KEY (Dep\_id)

)

alter table department drop dep\_code

alter table department drop dep\_name

alter table department add code int

alter table department add Name varchar(20)

select \* from departments

insert into departments values (1,9090,'IT')

insert into departments values (2,9010,'CS')

insert into departments values (3,9110,'BBA')

insert into departments values (4,9800,'MS')

insert into departments values (5,9700,'AD')

CREATE TABLE Branch\_contact

(

B\_phone INT,

B\_id INT,

PRIMARY KEY (B\_phone, B\_id),

FOREIGN KEY (B\_id) REFERENCES Branches(B\_id)

)

select \* from Branch\_contact

insert into Branch\_contact values (909283929,709)

insert into Branch\_contact values (909283929,710)

insert into Branch\_contact values (909283929,811)

insert into Branch\_contact values (909283929,900)

insert into Branch\_contact values (909283929,905)

CREATE TABLE Branch\_dep

(

B\_id INT,

Dep\_id INT,

PRIMARY KEY (B\_id, Dep\_id),

FOREIGN KEY (B\_id) REFERENCES Branches(B\_id),

FOREIGN KEY (Dep\_id) REFERENCES Departments(Dep\_id)

)

select \* from Branch\_dep

insert into Branch\_dep values (905,3)

insert into Branch\_dep values (900,2)

insert into Branch\_dep values (811,5)

insert into Branch\_dep values (710,4)

insert into Branch\_dep values (709,1)

CREATE TABLE Staff

(

St\_id INT NOT NULL,

St\_name Varchar(20),

salary INT,

Age INT,

PRIMARY KEY (St\_id)

)

alter table staff add check (age>20)

alter table staff add st\_lname varchar(20)

alter table staff add Loc varchar(20)

alter table staff add Address varchar(20)

alter table staff drop loc

alter table staff drop address

insert into staff values (70,'Mushtaq',50000,25)

insert into staff values (71,'Ahmad',15000,30)

insert into staff values (72,'Hashir',520000,40)

insert into staff values (73,'Ali',25000,44)

insert into staff values (74,'Usama',55000,21)

CREATE TABLE Dep\_st

(

St\_id INT,

Dep\_id INT,

PRIMARY KEY (St\_id, Dep\_id),

FOREIGN KEY (St\_id) REFERENCES Staff(St\_id),

FOREIGN KEY (Dep\_id) REFERENCES Departments(Dep\_id)

)

insert into dep\_st values (70,1)

insert into dep\_st values (71,2)

insert into dep\_st values (72,3)

insert into dep\_st values (73,4)

insert into dep\_st values (74,5)

CREATE TABLE Course

(

Co\_id INT NOT NULL,

Credit\_hrs INT,

Co\_name Varchar(20),

PRIMARY KEY (Co\_id)

)

select \* from course

alter table course add check (Credit\_hrs>2)

insert into course values (301,3,'DBS')

insert into course values (302,3,'CN')

insert into course values (303,3,'WT')

insert into course values (304,4,'OOP')

insert into course values (305,3,'SE')

CREATE TABLE Uni\_course

(

U\_id INT,

Co\_id INT,

PRIMARY KEY (U\_id, Co\_id),

FOREIGN KEY (U\_id) REFERENCES University(U\_id),

FOREIGN KEY (Co\_id) REFERENCES Course(Co\_id)

)

insert into Uni\_course values (1,301)

insert into Uni\_course values (2,301)

insert into Uni\_course values (3,301)

insert into Uni\_course values (4,301)

insert into Uni\_course values (5,301)

CREATE TABLE Class

(

C\_id INT NOT NULL,

C\_name Varchar(20),

C\_no INT,

PRIMARY KEY (C\_id)

)

select \* from class

insert into class values (101,'LT11',11)

insert into class values (102,'LT6',12)

insert into class values (103,'LT5',2)

insert into class values (104,'LT1',1)

insert into class values (105,'LT9',3)

CREATE TABLE Students

(

S\_id INT NOT NULL,

Fname Varchar(20),

Lname Varchar(20),

Roll\_no INT,

Age INT,

Semester INT,

H\_no INT,

St\_no INT,

City Varchar(10),

Co\_id INT,

PRIMARY KEY (S\_id),

FOREIGN KEY (Co\_id) REFERENCES Course(Co\_id)

)

alter table students add House\_no varchar(20)

alter table students drop H\_lname

alter table students add street\_no varchar(20)

alter table students drop st\_no

alter table students add mid\_name varchar(20)

alter table students drop st\_name

alter table students add check (age>17)

insert into students values (1,'Akash','Saqlain',1238,20,2,121,4,'RWP',301)

insert into students values (2,'Ali','Ahmad',1211,18,1,175,75,'ISB',302)

insert into students values (3,'Usama','Hadi',1322,25,3,123,5,'MUL',303)

insert into students values (4,'Shamsa','Habib',1533,24,5,121,32,'KRH',304)

insert into students values (5,'Ayesha','Arooj',1001,23,26,12,14,'IND',305)

CREATE TABLE St\_crs

(

S\_id INT,

Co\_id INT,

PRIMARY KEY (S\_id, Co\_id),

FOREIGN KEY (S\_id) REFERENCES Students(S\_id),

FOREIGN KEY (Co\_id) REFERENCES Course(Co\_id)

)

insert into St\_crs values (1,301)

insert into St\_crs values (2,302)

insert into St\_crs values (3,303)

insert into St\_crs values (4,304)

insert into St\_crs values (5,305)

CREATE TABLE st\_contact

(

Contact\_no INT,

S\_id INT,

PRIMARY KEY (Contact\_no, S\_id),

FOREIGN KEY (S\_id) REFERENCES Students(S\_id)

)

insert into St\_contact values (9008011,1)

insert into St\_contact values (9008021,2)

insert into St\_contact values (9008031,2)

insert into St\_contact values (9008041,3)

insert into St\_contact values (9008051,4)

CREATE TABLE Faculty

(

F\_id INT NOT NULL,

F\_name Varchar(20),

PRIMARY KEY (F\_id)

)

insert into faculty values (010,'FT1')

insert into faculty values (011,'FT2')

insert into faculty values (012,'FT3')

insert into faculty values (013,'FT4')

insert into faculty values (014,'FT5')

CREATE TABLE Books

(

B\_id INT NOT NULL,

B\_title varchar(20),

B\_writer varchar(20),

S\_id INT,

PRIMARY KEY (B\_id),

FOREIGN KEY (S\_id) REFERENCES Students(S\_id)

)

select \* from books

insert into books values (01,'Object','Azhar',1)

insert into books values (02,'Object1','Aslam',2)

insert into books values (03,'Object2','Ali',3)

insert into books values (04,'Object3','Rehan',4)

insert into books values (05,'Object4','Usama',5)

CREATE TABLE Borrow

(

Issue\_date INT,

Return\_Date INT,

S\_id INT,

B\_id INT,

PRIMARY KEY (S\_id, B\_id),

FOREIGN KEY (S\_id) REFERENCES Students(S\_id),

FOREIGN KEY (B\_id) REFERENCES Books(B\_id)

)

select \* from borrow

insert into borrow values (21,22,1,01)

insert into borrow values (21,22,2,02)

insert into borrow values (21,22,3,03)

insert into borrow values (21,22,4,04)

insert into borrow values (21,22,5,05)

CREATE TABLE Library

(

L\_id INT NOT NULL,

Lib\_name Varchar(20),

PRIMARY KEY (L\_id)

)

insert into library values (201,'OON')

insert into library values (202,'ONO')

insert into library values (203,'NOO')

insert into library values (204,'O1N')

insert into library values (205,'ON1')

CREATE TABLE Library\_book

(

B\_id INT,

L\_id INT,

PRIMARY KEY (B\_id, L\_id),

FOREIGN KEY (B\_id) REFERENCES Books(B\_id),

FOREIGN KEY (L\_id) REFERENCES Library(L\_id)

)

insert into Library\_book values (01,201)

insert into Library\_book values (02,202)

insert into Library\_book values (03,203)

insert into Library\_book values (04,204)

insert into Library\_book values (05,205)

CREATE TABLE Teachers

(

t\_id INT NOT NULL,

T\_name Varchar(20),

Age INT,

U\_id INT,

F\_id INT,

PRIMARY KEY (t\_id),

FOREIGN KEY (U\_id) REFERENCES University(U\_id),

FOREIGN KEY (F\_id) REFERENCES Faculty(F\_id)

)

alter table teachers add T\_lname varchar(20)

alter table teachers add T\_Mname varchar(20)

alter table teachers add T\_Adress varchar(20)

alter table teachers drop T\_lname

alter table teachers drop T\_Mname

alter table teachers drop T\_Adress

insert into teachers values (1,'Azhar',28,1,010)

insert into teachers values (2,'Naseer',30,1,011)

insert into teachers values (3,'Mariyam',28,1,012)

insert into teachers values (4,'Abdul',28,1,013)

insert into teachers values (5,'Rehman',28,1,014)

CREATE TABLE Permanent\_Teacher

(

Salary INT,

t\_id INT,

PRIMARY KEY (Salary, t\_id),

FOREIGN KEY (t\_id) REFERENCES Teachers(t\_id)

)

insert into Permanent\_Teacher values (50000,1)

insert into Permanent\_Teacher values (100000,2)

insert into Permanent\_Teacher values (150000,3)

CREATE TABLE Temporary\_Teacher

(

Hr\_Rate INT,

t\_id INT,

PRIMARY KEY (Hr\_Rate, t\_id),

FOREIGN KEY (t\_id) REFERENCES Teachers(t\_id)

)

insert into Temporary\_Teacher values (50000,4)

insert into Temporary\_Teacher values (10000,5)

CREATE TABLE Teacher\_Contact

(

Contact\_no INT,

t\_id INT,

PRIMARY KEY (Contact\_no, t\_id),

FOREIGN KEY (t\_id) REFERENCES Teachers(t\_id)

)

insert into Teacher\_Contact values (0513167895,1)

insert into Teacher\_Contact values (0513164892,2)

insert into Teacher\_Contact values (0513167231,3)

insert into Teacher\_Contact values (0513167825,4)

insert into Teacher\_Contact values (0513167235,5)

CREATE TABLE Teacher\_Class

(

t\_id INT,

C\_id INT,

PRIMARY KEY (t\_id, C\_id),

FOREIGN KEY (t\_id) REFERENCES Teachers(t\_id),

FOREIGN KEY (C\_id) REFERENCES Class(C\_id)

)

insert into Teacher\_class values (1,101)

insert into Teacher\_class values (2,102)

insert into Teacher\_class values (3,103)

insert into Teacher\_class values (4,104)

insert into Teacher\_class values (5,105)