THE MAIN CHANGE OF 1-M RELATIONSHIP OCCUR IN LOAN TABLE WITH FORIGN KEY AND NULL CONSTRAINT FOREIGN KEYS STDNO, INSTID, LENDERNO and not null constraint in all three.

NULL CONSTRAINT ONLY AND ENTITY TABLE CHANGE RULE

CREATE TABLE STUDENT

(

STDNO VARCHAR (8),

STDNAME VARCHAR (20) CONSTRAINT STDNAMEREQUIRED NOT NULL,

STDADDRESS VARCHAR (20) CONSTRAINT STDADDRESSREQUIRED NOT NULL,

STDCITY VARCHAR (20) CONSTRAINT STDCITYREQUIRED NOT NULL,

STDSTATE VARCHAR (20) CONSTRAINT STDSTATEREQUIRED NOT NULL,

STDZIP VARCHAR (20) CONSTRAINT STDZIPREQUIRED NOT NULL,

STDEMAIL VARCHAR (20) CONSTRAINT STDEMAILREQUIRED NOT NULL,

CONSTRAINT PKSTUDENT PRIMARY KEY (STDNO)

);

NULL CONSTRAINT ONLY AND ENTITY TABLE CHANGE RULE

CREATE TABLE INSTUTION

(

INSTID VARCHAR (20),

INSTNAME VARCHAR (20) CONSTRAINT INSTNAMEREQUIRED NOT NULL,

INSTMASCOT VARCHAR (20) CONSTRAINT INSTMASCOATREQUIRED NOT NULL,

CONSTRAINT PKINSTITUTE PRIMARY KEY (INSTID)

);

NULL CONSTRAINT ONLY AND ENTITY TABLE CHANGE RULE

CREATE TABLE LENDER

( LENDERNO VARCHAR (20),

LENDERNAME VARCHAR (20) CONSTRAINT LEDERNAMEREQUIRED NOT NULL,

CONSTRAINT PKLENDER PRIMARY KEY (LENDERNO)

);

1-M RELATIONSHIP APPLIED FOREIGN KEY WITH NOT NULL CONSTRAINT STDNO FROM STUDENT TABLE

1-M RELATIONSHIP INSTUTION TABLE FOREIGN KEY INSTID WITH NULL CONSTRAINT CHILD TABLE IS LOAN TABLE

1-M RELATIONSHIP LENDER TABLE FOREIGN KEY LENDERNO WITH NULL CONSTRAINT CHILD TABLE IS LOAN

CREATE TABLE LOAN

(

LOANNO VARCHAR (20),

PROCDATE DATE CONSTRAINT LOANPRODATEREQUIRED NOT NULL,

DISBMETHOD VARCHAR (20) CONSTRAINT LOANDISBMETHODREQUIRED NOT NULL,

DISBBANK VARCHAR (20) CONSTRAINT LOANDISBBANKREQUIRED NOT NULL,

DATEAUTH DATE CONSTRAINT LOANDATEAUTHREQUIRED NOT NULL,

NOTEVALUE VARCHAR (20) CONSTRAINT LOANNOTEVALREQUIRED NOT NULL,

SUBSIDIZED VARCHAR (20) CONSTRAINT LOANSUBSIDIZEDREQUIRED NOT NULL,

RATE INTEGER CONSTRAINT LOANRATEREQUIRED NOT NULL,

STDNO VARCHAR (20) CONSTRAINT LOANSTDIDREQUIRED NOT NULL,

INSTID VARCHAR (20) CONSTRAINT LOANINSTIDREQUIRED NOT NULL,

LENDERNO VARCHAR (20) CONSTRAINT LOANLENDERNOREQUIRED NOT NULL,

CONSTRAINT PKLOAN PRIMARY KEY (LOANNO),

CONSTRAINT FKSTDNO FOREIGN KEY(STDNO) REFERENCES STUDENT,

CONSTRAINT FKINSTID FOREIGN KEY(INSTID) REFERENCES ISTITUTION,

CONSTRAINT FKLENDERNO FOREIGN KEY(LENDERNO) REFERENCES LENDER

);

IDENTIFYING RULE APPLIED ABOVE SO PRIMARY KRY FORM BY MERGE AND FOREIGN KEY WITH NOT NULL CONSTRAINT USED IN LOANNO

CREATE TABLE DISBURSELINE

(

DATESENT DATE,

AMOUNT INTEGER CONSTRAINT AMOUNTREQUIRED NOT NULL,

ORIGFEE INTEGER CONSTRAINT ORIGFEEREQUIRED NOT NULL,

GUARFEE INTEGER CONSTRAINT GUARFEEREQUIRED NOT NULL,

LOANNO VARCHAR (20) CONSTRAINT DISBLOANNOREQUIRED NOT NULL,

CONSTRAINT PKDISBURSE PRIMARY KEY (DATESENT, LOANNO),

CONSTRAINT FKDISBLOANNO FOREIGN KEY (LOANNO) REFERENCES LOAN

);