**Skapar de olika tabellerna:**

**Utbildning**

CREATE TABLE Utbildning (

UID char(8) PRIMARY KEY,

UtbNamn char(20) NOT NULL,

InstID char(5) NOT NULL,

FDatum date,

TDatum date,

UtbInfo char(400),

UtbAnsv char(11) REFERENCES Anstalld(AID),

CHECK (UID LIKE '[A-Z][A-Z][A-Z][A-Z][A-Z][A-Z][0-9][0-9]' AND UtbAnsv LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]')

);

// Lägger till en referensnyckel

ALTER TABLE Utbildning

ADD CONSTRAINT Utbildning\_fk1 FOREIGN KEY (InstID) REFERENCES Institution(InstID) NOT FOR REPLICATION

**Kurs**

CREATE TABLE Kurs (

KID char(6) PRIMARY KEY,

KursNamn char(20) NOT NULL,

KursInfo char(400),

CHECK (KID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]'));

ALTER TABLE Kurs

ADD KursPoang char(30)

**KursMoment**

CREATE TABLE KursMoment(

KMID int PRIMARY KEY, // Skapa som en identity

KID char(6) REFERENCES Kurs(KID),

Moment char(20));

CREATE RULE rule\_kmid

As @kmid LIKE '[0-9][0-9][0-9]' // Ta bort

EXEC sp\_bindrule 'rule\_kmid', 'KursMoment.KMID'

CREATE RULE rule\_KursID

As @id LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]'

EXEC sp\_bindrule 'rule\_KursID', 'KursMoment.KID'

ALTER TABLE KursMoment

ADD Beskrivning char(300)

sp\_unbindrule 'KursMoment.KMID'

DROP RULE rule\_kmid

ALTER TABLE KursMoment

ADD AID char(11),

CHECK (AID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]')

ALTER TABLE KursMoment

ADD CONSTRAINT KursMoment\_fk FOREIGN KEY (AID) REFERENCES Anstalld(AID) NOT FOR REPLICATION

**StuderandeMoment**

CREATE TABLE StuderandeMoment(

EID char(11) REFERENCES Studerande(EID),

KMID int REFERENCES KursMoment(KMID),

Datum date,

CONSTRAINT StuderandeMoment\_pk PRIMARY KEY(EID, KMID),

CHECK(EID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]' AND KMID LIKE '[0-9][0-9][0-9]'));

**UtbSchema**

CREATE TABLE UtbSchema (

UID char(8) REFERENCES Utbildning(UID),

KID char(6) REFERENCES Kurs(KID),

FDatum date,

TDatum date,

KursAnsv int,

CONSTRAINT UtbSchema\_pk PRIMARY KEY (UID, KID),

CHECK (UID LIKE '[A-Z][A-Z][A-Z][A-Z][A-Z][A-Z][0-9][0-9]' AND KID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]')

);

// Ändrar datatypen

ALTER TABLE UtbSchema

ALTER COLUMN KursAnsv char(11)

// Lägger till en regel

CREATE RULE rule\_pNr

As @pNr LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]'

EXEC sp\_bindrule 'rule\_pNr', 'UtbSchema.KursAnsv'

// Lägger till en referensnyckel

ALTER TABLE UtbSchema

ADD CONSTRAINT UtbSchema\_fk1 FOREIGN KEY(KursAnsv) REFERENCES Anstalld(AID) NOT FOR REPLICATION

**Studerande**

CREATE TABLE Studerande (

EID char(11) PRIMARY KEY,

UID char(8) NOT NULL REFERENCES Utbildning(UID),

FNamn char(20) NOT NULL,

ENamn char(20) NOT NULL,

GAdress char(30),

PostNr int,

Ort char(20),

Epost char(40),

TfnNr char(11),

CHECK (UID LIKE '[A-Z][A-Z][A-Z][A-Z][A-Z][A-Z][0-9][0-9]' AND EID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]'));

**Betyg**

CREATE TABLE Betyg (

KID char(6) REFERENCES Kurs(KID),

EID char(11) REFERENCES Studerande(EID),

Datum date,

Gradering char(2),

CONSTRAINT betyg\_pk PRIMARY KEY (KID, EID),

CHECK (KID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]' AND EID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]'));

**Anstalld**

CREATE TABLE Anstalld(

AID char(11) PRIMARY KEY,

FNamn char(20) NOT NULL,

ENamn char(20) NOT NULL,

GAdress char(30),

PostNr int,

Ort char(20),

Epost char(40),

TfnNr char(11),

KontoNr char(15),

GLon int,

BefID int,

TjanstGr int,

CHECK(AID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]')

);

// Lägger till en referensnyckel

ALTER TABLE Anstalld

ADD CONSTRAINT Anstalld\_fk1 FOREIGN KEY(BefID) REFERENCES Befattning(BefID) NOT FOR REPLICATION

// Lägger till en regel

CREATE RULE rule\_BefID

As @id LIKE '[0-9][0-9][0-9]'

EXEC sp\_bindrule 'rule\_BefID', 'Anstalld.BefID'

ALTER TABLE Anstalld

ADD Losen char(10)

**KursSchema**

CREATE TABLE KursSchema(

KID char(6) REFERENCES Kurs(KID),

InstID char(5) REFERENCES Institution(InstID),

FDatum date,

TDatum date,

AID char(11) REFERENCES Anstalld(AID),

CHECK(KID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]' AND AID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]'));

CREATE RULE rule\_KursSchema\_InstID

As @id LIKE '[A-Z][A-Z][A-Z][A-Z][0-9]'

EXEC sp\_bindrule 'rule\_KursSchema\_InstID', 'KursSchema.InstId'

**Institution**

CREATE TABLE Institution(

InstID char(5) PRIMARY KEY,

InstNamn char(20) NOT NULL,

GAdress char(30),

PostNr int,

Ort char(20),

CHECK(InstID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9]'));

**Befattning**

CREATE TABLE Befattning(

BefID int PRIMARY KEY,

BefNamn char(20),

CHECK(BefID LIKE '[0-9][0-9][0-9]'));

**ArbUppgift**

CREATE TABLE ArbUppgift(

AUID int PRIMARY KEY,

AUNamn char(20),

ArbBeskrivning char(300),

CHECK(AUID LIKE '[0-9][0-9][0-9]'));

// Lägger till data i en kolumn

UPDATE ArbUppgift

SET ArbBeskrivning = 'Städa Toaletter och salar', AUNamn = 'Städ'

WHERE AUID = 123

// Lägger till data i en kolumn

ALTER TABLE ArbUppgift

ALTER COLUMN AUNamn char(20) NOT NULL

**AnsvOmr**

CREATE TABLE AnsvOmr(

BefID int,

AUID int,

CONSTRAINT AnsvOmr\_pk PRIMARY KEY (BefID, AUID),

CHECK(BefID LIKE '[0-9][0-9][0-9]' AND AUID LIKE '[0-9][0-9][0-9]'));

**SalsSchema**

CREATE TABLE SalsSchema(

SalsID int,

Datum date,

FTid char(5),

TTid char(5),

InstID char(5) REFERENCES Institution(InstID),

KID char(6) REFERENCES Kurs(KID),

CONSTRAINT SalsSchema\_pk PRIMARY KEY(SalsID, Datum, FTid),

CHECK(SalsID LIKE '[0-9][0-9][0-9]' AND InstID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9]' AND KID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9][0-9]'));

**InstBefattning**

CREATE TABLE InstBefattning(

InstID char(5) REFERENCES Institution(InstID),

BefID int REFERENCES Befattning(BefID),

AID char(11) REFERENCES Anstalld(AID),

CONSTRAINT InstBefattning\_pk PRIMARY KEY(InstID, BefID, AID),

CHECK(InstID LIKE '[A-Z][A-Z][A-Z][A-Z][0-9]' AND BefID LIKE '[0-9][0-9][0-9]' AND AID LIKE '[0-9][0-9][0-9][0-9][0-9][0-9]-[0-9][0-9][0-9][0-9]'));

**Testinmatningar**

INSERT INTO Utbildning VALUES('abcdef12', 'test1', 'abcd1', '2018-03-19', '2019-06-01', 'test', '811221-3940')

INSERT INTO Anstalld (AID, FNamn, ENamn)VALUES('811221-3940', 'test', 'testsson')

INSERT INTO Kurs (KID, KursNamn) VALUES('ABCD12', 'Kurs1')

INSERT INTO UtbSchema (UID, KID) VALUES('ABCDEF12', 'ABCD12')

INSERT INTO Studerande (EID, UID, FNamn, ENamn) VALUES('030808-0696', 'ABCDEF12','Joshua', 'Torres')

INSERT INTO Betyg (KID, EID) VALUES('ABCD12', '030808-0696')

INSERT INTO Institution (InstID, InstNamn) VALUES('ABCD1', 'Skola1')

INSERT INTO KursSchema (KID, InstID, AID) VALUES('ABCD12', 'ABCD1', '811221-3940')

INSERT INTO Befattning (BefID) VALUES('123')

INSERT INTO ArbUppgift (AUID) VALUES('123')

INSERT INTO AnsvOmr (BefID, AUID) VALUES('123', '123')

INSERT INTO SalsSchema (SalsID, Datum, FTid, InstID, KID) VALUES('123', '2018-04-01', '08.00', 'ABCD1', 'ABCD12')

INSERT INTO InstBefattning (InstID, BefID, AID) VALUES('ABCD1', '123', '811221-3940')

UPDATE Kurs

SET KursPoang = '20 Yrkeshögskolepoäng'

WHERE KID = 'ABCD12'

UPDATE Kurs

SET KursInfo = 'Bla blablablbaj jhnsdöfhh'

WHERE KID = 'ABCD12'

INSERT INTO KursMoment (KID, Moment, Beskrivning) VALUES('ABCD12', 'Moment1', 'testar lite kjnsödkjfn lkjsdhfnl hjnsd ljh')

Update Anstalld

SET GAdress = 'TestGatan 1', PostNr = 12345, Ort = 'Storstaden', Epost = 'namn@fejkmail.com', TfnNr = '0700-112233', KontoNr = '111 222 333-4', GLon = 30000, BefID = 123, TjanstGr = 100, Losen = 1234567890

WHERE AID = '811221-3940'

UPDATE KursMoment

Set AID = '811221-3940'

WHERE KMID = 3

UPDATE UtbSchema

SET KursAnsv = '811221-3940'

WHERE UID = 'ABCDEF12'