**Database Project**

**MUHAMMAD AL MAMUN**

**SSNB6**

drop table if exists People;

create table People

(

person\_id **int**(**20**) primary key,

address\_id **int**(**20**),

title\_code **varchar**(**20**),

first\_name **varchar**(**20**),

middle\_name **varchar**(**20**),

last\_name **varchar**(**20**),

date\_of\_birth **varchar**(**20**),

date\_in **varchar**(**20**),

date\_out **varchar**(**20**),

phone\_number **varchar**(**20**),

cell\_phone **varchar**(**20**),

email\_address **varchar**(**20**),

comments **varchar**(**255**),

other\_person\_details **varchar**(**255**)

);

insert into People(person\_id,address\_id,title\_code,first\_name,middle\_name,last\_name,date\_of\_birth,date\_in,

date\_out,phone\_number,cell\_phone,email\_address,comments,other\_person\_details)

values(**111222333**,**11432**,'1a.','thomas','r','hardy','08-22-1970','05-22-2010','07-22-2016','3473332111','9173332111','abcd@gmail.com','nice\_person','n/a'),

(**111222344**,**11211**,'1b.','william','m','shane','11-25-1973','07-12-2013','07-12-2016','3472222112','917333211','bcde@gmail.com','good\_person','n/a'),

(**111222354**,**11322**,'1c.','adam','b','david','10-20-1979','11-11-2007','10-10-2017','3472221212','9173322012','cdef@gmail.com','nice','n/a'),

(**111222321**,**11424**,'1d.','john','c','smith','12-07-1978','08-22-2010','03-20-2017','3472221232','9173344532','defg@yahoo.com','good','n/a'),

(**111222622**,**11254**,'1e.','white','s','baker','10-08-1975','12-08-2006','08-20-2015','3472123434','9173114343','baker@gmail.com','nice','n/a');

select \* from People;

ALTER TABLE People

ADD CONSTRAINT fk\_address\_id FOREIGN KEY(address\_id) REFERENCES Addresses(address\_id)

ON DELETE CASCADE ON UPDATE CASCADE,

ADD CONSTRAINT fk\_title\_code FOREIGN KEY(title\_code) REFERENCES Titles(title\_code)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Addresses;

create table Addresses

(

address\_id **int**(**20**)primary key,

line\_1 **varchar**(**50**),

line\_2 **varchar**(**50**),

city **varchar**(**20**),

zip\_postcode **varchar**(**10**),

state\_province\_country **varchar**(**20**),

country **varchar**(**20**)

);

insert into Addresses(address\_id,line\_1,line\_2,city,zip\_postcode,state\_province\_country,country)

values(**11432**,'40 n.pearl st.','apt#13-a','albany','12207','ny','u.s.a.'),

(**11211**,'2655 richmond ave','apt#c3','staten island','10314','ny','u.s.a.'),

(**11322**,'123 main street','unit#2','flushing','11390','ny','u.s.a.'),

(**11424**,'3801 boston rd','apt#3b','bronx','10466','ny','u.s.a.'),

(**11254**,'245 e 93rd st.','apt#10e','manhattan','10128','ny','u.s.a.');

select \* from Addresses;

drop table if exists Associates;

create table Associates

(

person\_id **int**(**20**),

associate\_person\_id **int**(**20**),

date\_association\_started **varchar**(**20**),

primary key(person\_id,associate\_person\_id)

);

insert into Associates(person\_id,associate\_person\_id,date\_association\_started)

values(**111222333**,**111222333**,'11-11-2011'),

(**111222344**,**111222344**,'08-12-2014'),

(**111222354**,**111222354**,'02-20-2008'),

(**111222321**,**111222321**,'08-20-2011'),

(**111222622**,**111222622**,'10-10-2007');

select \* from Associates;

ALTER TABLE Associates

ADD CONSTRAINT fk\_person\_id FOREIGN KEY(person\_id) REFERENCES People(person\_id)

ON DELETE CASCADE ON UPDATE CASCADE,

ADD CONSTRAINT fk\_associate\_person\_id FOREIGN KEY(associate\_person\_id) REFERENCES People(person\_id)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Titles;

create table Titles

(

title\_code **varchar**(**20**) primary key,

title\_description **varchar**(**20**)

);

insert into Titles(title\_code,title\_description)

values('1a.','mister'),

('1b.','mister'),

('1c.','mister'),

('1d.','mister'),

('1e.','mister');

select \* from Titles;

drop table if exists Officer\_shifts;

create table Officer\_shifts

(

officer\_id **int**(**20**),

shift\_id **int**(**20**),

date\_started **varchar**(**20**),

date\_sended **varchar**(**20**),

primary key(officer\_id,shift\_id)

);

insert into Officer\_shifts(officer\_id,shift\_id,date\_started,date\_sended)

values(**65432**,**1001**,'08-10-2016','10-11-2016'),

(**65433**,**1002**,'05-22-2016','07-22-2016'),

(**65434**,**1003**,'07-02-2016','09-23-2016'),

(**65435**,**1004**,'03-03-2017','05-11-2017'),

(**65436**,**1005**,'05-22-2017','06-11-2017');

select \* from Officer\_shifts;

ALTER TABLE Officer\_shifts

ADD CONSTRAINT fk\_officer\_id FOREIGN KEY(officer\_id) REFERENCES Officers(officer\_id)

ON DELETE CASCADE ON UPDATE CASCADE,

ADD CONSTRAINT fk\_shift\_id FOREIGN KEY(shift\_id) REFERENCES Shifts(shift\_id)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Officers;

create table Officers

(

officer\_id **int**(**20**)primary key,

dept\_code **varchar**(**20**),

rank\_code **varchar**(**20**),

badge\_number **varchar**(**20**),

date\_become\_officer **varchar**(**20**),

other\_officer\_details **varchar**(**20**)

);

insert into Officers(officer\_id,dept\_code,rank\_code,badge\_number,date\_become\_officer,other\_officer\_details)

values(**65432**,'a-01','a1','7854','10-10-2010','n/a'),

(**65433**,'b-02','b2','7863','11-12-2011','n/a'),

(**65434**,'c-03','c3','7873','11-08-2012','n/a'),

(**65435**,'d-04','d4','7875','10-08-2013','n/a'),

(**65436**,'e-05','e5','7876','08-10-2014','n/a');

select \* from Officers;

ALTER TABLE Officers

ADD CONSTRAINT fk\_dept\_code FOREIGN KEY(dept\_code) REFERENCES Departments1(dept\_code)

ON DELETE CASCADE ON UPDATE CASCADE,

ADD CONSTRAINT fk\_rank\_code FOREIGN KEY(rank\_code) REFERENCES Ranks(rank\_code)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Ranks;

create table Ranks

(

rank\_code **varchar**(**20**) primary key,

rank\_short\_name **varchar**(**20**),

rank\_description **varchar**(**20**)

);

insert into Ranks(rank\_code,rank\_short\_name,rank\_description)

values('a1','sup.','superintendent'),

('b2','lt','lieutenant'),

('c3','cap','captain'),

('d4','officer','officer'),

('e5','sgt.','sergeant');

select \* from Ranks;

drop table if exists Shifts;

create table Shifts

(

shift\_id **int**(**20**) primary key,

shift\_description **varchar**(**20**),

start\_time **varchar**(**20**),

end\_time **varchar**(**20**)

);

insert into Shifts(shift\_id,shift\_description,start\_time,end\_time)

values(**1001**,'b-watch','8:ooam','4:oopm'),

(**1002**,'patrol','12:00am','8:00am'),

(**1003**,'traffic','4:00pm','12;00am'),

(**1004**,'special-duty','8:00am','4:00pm'),

(**1005**,'rookie','8:00am','4:00pm');

select \* from Shifts;

drop table if exists Departments1;

create table Departments1

(

dept\_code **varchar**(**20**) primary key,

parent\_dept\_code **varchar**(**20**),

dept\_description **varchar**(**20**)

);

insert into Departments1(dept\_code,parent\_dept\_code,dept\_description)

values('a-01','a-01','administrative'),

('b-02','b-02','police'),

('c-03','c-03','detective'),

('d-04','d-04','police'),

('e-05','e-05','police');

select \* from Departments1;

SELECT T1.dept\_code, T2.parent\_dept\_code AS parent\_dept\_code FROM Departments1 AS T1 JOIN Departments1 AS T2 ON T1.parent\_dept\_code=T2. dept\_code;

drop table if exists People\_in\_Incidents;

create table People\_in\_Incidents

(

person\_id **int**(**20**),

incident\_id **int**(**20**),

role\_code **varchar**(**20**),

primary key(person\_id,incident\_id),

FOREIGN KEY (person\_id) REFERENCES People (person\_id),

FOREIGN KEY (incident\_id) REFERENCES Incidents (incident\_id)

);

insert into People\_in\_Incidents(person\_id,incident\_id,role\_code)

values(**111222333**,**006790**,'abc1'),

(**111222344**,**006791**,'abc2'),

(**111222354**,**006792**,'abc3'),

(**111222321**,**006793**,'abc4'),

(**111222622**,**006794**,'abc5');

select \* from People\_in\_Incidents;

ALTER TABLE People\_in\_Incidents

ADD CONSTRAINT fk\_role\_code FOREIGN KEY(role\_code) REFERENCES Roles(role\_code)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Roles;

create table Roles

(

role\_code **varchar**(**20**) primary key,

role\_description **varchar**(**50**)

);

insert into Roles(role\_code,role\_description)

values('abc1','suspect custody'),

('abc2','investigating officer try to arrest criminal'),

('abc3','suspect custody'),

('abc4','suspect custody'),

('abc5','suspect custody');

select \* from Roles;

drop table if exists Officers\_in\_Incidents;

create table Officers\_in\_Incidents

(

officer\_id **int**(**20**),

incident\_id **int**(**20**),

role\_code **varchar**(**20**),

primary key(officer\_id,incident\_id),

FOREIGN KEY (officer\_id) REFERENCES Officers(officer\_id),

FOREIGN KEY (incident\_id) REFERENCES Incidents (incident\_id)

);

insert into Officers\_in\_Incidents(officer\_id,incident\_id,role\_code)

values('65432','006790','abc1'),

('65433','006791','abc2'),

('65434','006792','abc3'),

('65435','006793','abc4'),

('65436','006794','abc5');

select \* from Officers\_in\_Incidents;

ALTER TABLE Officers\_in\_Incidents

ADD FOREIGN KEY(role\_code) REFERENCES Roles(role\_code)

ON DELETE CASCADE ON UPDATE CASCADE;

drop table if exists Incident\_Outcomes;

create table Incident\_Outcomes

(

outcome\_code **varchar**(**20**)primary key,

outcome\_description **varchar**(**50**)

);

insert into Incident\_Outcomes(outcome\_code,outcome\_description)

values('12348','case solved'),

('12349','case solved'),

('12350','case solved'),

('12351','case solved'),

('12352','case solved');

select \* from Incident\_Outcomes;

drop table if exists Incident\_Status;

create table Incident\_Status

(

status\_code **varchar**(**20**) primary key,

status\_description **varchar**(**50**)

);

insert into Incident\_Status(status\_code,status\_description)

values('531','under investigation'),

('532','investigation pending'),

('533','delay investigation'),

('534','investigation completed'),

('535','investigation progress');

select \* from Incident\_Status;

drop table if exists Incident\_Types;

create table Incident\_Types

(

type\_code **varchar**(**20**) primary key,

type\_description **varchar**(**50**)

);

select \* from Incident\_Types;

insert into Incident\_Types(type\_code,type\_description)

values('21','felony'),

('22','assault'),

('23','fraud'),

('24','identity theft'),

('25','murder');

select \* from Incident\_Types;

drop table if exists Incidents;

create table Incidents

(

incident\_id **int**(**20**) NOT NULL,

outcome\_code **varchar**(**20**) NOT NULL,

status\_code **varchar**(**20**)NOT NULL,

type\_code **varchar**(**20**) NOT NULL,

date\_time\_incident\_started **date**,

date\_time\_incident\_ended **date**,

incident\_description **varchar**(**50**) NOT NULL,

other\_details **varchar**(**20**) NOT NULL,

PRIMARY KEY (incident\_id)

);

insert into Incidents(incident\_id,outcome\_code,status\_code,type\_code,date\_time\_incident\_started,date\_time\_incident\_ended,incident\_description,other\_details)

values('006790','12348','531','21','05-20-2010','05-20-2010','felony','n/a'),

('006791','12349','532','22','07-10-2013',',07-10-2013','assault','n/a'),

('006792','12350','533','23','11-09-2007','11-09-2007','fraud','n/a'),

('006793','12351','534','24','08-20-2010','08-20-2010','identity theft','n/a'),

('006794','12352','535','25','12-06-2006','12-06-2006','murder','n/a');

select \* from Incidents;

ALTER TABLE Incidents

ADD FOREIGN KEY(outcome\_code) REFERENCES Incident\_Outcomes (outcome\_code) ON DELETE CASCADE,

ADD FOREIGN KEY(status\_code) REFERENCES Incident\_Status(status\_code)ON DELETE CASCADE,

ADD FOREIGN KEY(type\_code) REFERENCES Incident\_Types(type\_code) ON DELETE CASCADE;