/\*create databace\*/

create database database\_JV;

use database\_JV

/\* begin table creation \*/

create table department

(dept\_id smallint unsigned not null auto\_increment,

name varchar(20) not null,

constraint pk\_department primary key (dept\_id)

);

create table branch

(branch\_id smallint unsigned not null auto\_increment,

name varchar(20) not null,

address varchar(30),

city varchar(20),

state varchar(2),

zip varchar(12),

constraint pk\_branch primary key (branch\_id)

);

create table employee

(emp\_id smallint unsigned not null auto\_increment,

fname varchar(20) not null,

lname varchar(20) not null,

start\_date date not null,

end\_date date,

superior\_emp\_id smallint unsigned,

dept\_id smallint unsigned,

title varchar(20),

assigned\_branch\_id smallint unsigned,

constraint fk\_e\_emp\_id

foreign key (superior\_emp\_id) references employee (emp\_id),

constraint fk\_dept\_id

foreign key (dept\_id) references department (dept\_id),

constraint fk\_e\_branch\_id

foreign key (assigned\_branch\_id) references branch (branch\_id),

constraint pk\_employee primary key (emp\_id)

);

create table officer

(officer\_id smallint unsigned not null auto\_increment,

cust\_id integer unsigned not null,

fname varchar(30) not null,

lname varchar(30) not null,

title varchar(20),

start\_date date not null,

end\_date date,

constraint fk\_o\_cust\_id foreign key (cust\_id)

references business (cust\_id),

constraint pk\_officer primary key (officer\_id)

);

create table transaction

(txn\_id integer unsigned not null auto\_increment,

txn\_date datetime not null,

account\_id integer unsigned not null,

txn\_type\_cd enum('DBT','CDT'),

amount double(10,2) not null,

teller\_emp\_id smallint unsigned,

execution\_branch\_id smallint unsigned,

funds\_avail\_date datetime,

constraint fk\_t\_account\_id foreign key (account\_id)

references account (account\_id),

constraint fk\_teller\_emp\_id foreign key (teller\_emp\_id)

references employee (emp\_id),

constraint fk\_exec\_branch\_id foreign key (execution\_branch\_id)

references branch (branch\_id),

constraint pk\_transaction primary key (txn\_id)

);

/\* end table creation \*/

/\* begin data population \*/

/\* department data \*/

insert into department (dept\_id, name)

values (null, 'Operations');

insert into department (dept\_id, name)

values (null, 'Loans');

insert into department (dept\_id, name)

values (null, 'Administration');

/\* branch data \*/

insert into branch (branch\_id, name, address, city, state, zip)

values (null, 'Headquarters', '3882 Main St.', 'Waltham', 'MA', '02451');

insert into branch (branch\_id, name, address, city, state, zip)

values (null, 'Woburn Branch', '422 Maple St.', 'Woburn', 'MA', '01801');

insert into branch (branch\_id, name, address, city, state, zip)

values (null, 'Quincy Branch', '125 Presidential Way', 'Quincy', 'MA', '02169');

insert into branch (branch\_id, name, address, city, state, zip)

values (null, 'So. NH Branch', '378 Maynard Ln.', 'Salem', 'NH', '03079');

/\* employee data \*/

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Michael', 'Smith', '2001-06-22',

(select dept\_id from department where name = 'Administration'),

'President',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Susan', 'Barker', '2002-09-12',

(select dept\_id from department where name = 'Administration'),

'Vice President',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Robert', 'Tyler', '2000-02-09',

(select dept\_id from department where name = 'Administration'),

'Treasurer',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Susan', 'Hawthorne', '2002-04-24',

(select dept\_id from department where name = 'Operations'),

'Operations Manager',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'John', 'Gooding', '2003-11-14',

(select dept\_id from department where name = 'Loans'),

'Loan Manager',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Helen', 'Fleming', '2004-03-17',

(select dept\_id from department where name = 'Operations'),

'Head Teller',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Chris', 'Tucker', '2004-09-15',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Sarah', 'Parker', '2002-12-02',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Jane', 'Grossman', '2002-05-03',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Headquarters'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Paula', 'Roberts', '2002-07-27',

(select dept\_id from department where name = 'Operations'),

'Head Teller',

(select branch\_id from branch where name = 'Woburn Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Thomas', 'Ziegler', '2000-10-23',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Woburn Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Samantha', 'Jameson', '2003-01-08',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Woburn Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'John', 'Blake', '2000-05-11',

(select dept\_id from department where name = 'Operations'),

'Head Teller',

(select branch\_id from branch where name = 'Quincy Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Cindy', 'Mason', '2002-08-09',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Quincy Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Frank', 'Portman', '2003-04-01',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'Quincy Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Theresa', 'Markham', '2001-03-15',

(select dept\_id from department where name = 'Operations'),

'Head Teller',

(select branch\_id from branch where name = 'So. NH Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Beth', 'Fowler', '2002-06-29',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'So. NH Branch'));

insert into employee (emp\_id, fname, lname, start\_date,

dept\_id, title, assigned\_branch\_id)

values (null, 'Rick', 'Tulman', '2002-12-12',

(select dept\_id from department where name = 'Operations'),

'Teller',

(select branch\_id from branch where name = 'So. NH Branch'));

/\* create data for self-referencing foreign key 'superior\_emp\_id' \*/

create temporary table emp\_tmp as

select emp\_id, fname, lname from employee;

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Smith' and fname = 'Michael')

where ((lname = 'Barker' and fname = 'Susan')

or (lname = 'Tyler' and fname = 'Robert'));

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Tyler' and fname = 'Robert')

where lname = 'Hawthorne' and fname = 'Susan';

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Hawthorne' and fname = 'Susan')

where ((lname = 'Gooding' and fname = 'John')

or (lname = 'Fleming' and fname = 'Helen')

or (lname = 'Roberts' and fname = 'Paula')

or (lname = 'Blake' and fname = 'John')

or (lname = 'Markham' and fname = 'Theresa'));

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Fleming' and fname = 'Helen')

where ((lname = 'Tucker' and fname = 'Chris')

or (lname = 'Parker' and fname = 'Sarah')

or (lname = 'Grossman' and fname = 'Jane'));

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Roberts' and fname = 'Paula')

where ((lname = 'Ziegler' and fname = 'Thomas')

or (lname = 'Jameson' and fname = 'Samantha'));

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Blake' and fname = 'John')

where ((lname = 'Mason' and fname = 'Cindy')

or (lname = 'Portman' and fname = 'Frank'));

update employee set superior\_emp\_id =

(select emp\_id from emp\_tmp where lname = 'Markham' and fname = 'Theresa')

where ((lname = 'Fowler' and fname = 'Beth')

or (lname = 'Tulman' and fname = 'Rick'));

drop table emp\_tmp;

/\* end \*/