/\* MySQL \*/

**create table product\_type**

(product\_type\_cd varchar(10) not null,

name varchar(50) not null,

constraint pk\_product\_type primary key (product\_type\_cd));

**create table product**

(product\_cd varchar(10) not null,

name varchar(50) not null,

product\_type\_cd varchar(10) not null,

date\_offered date,

date\_retired date,

constraint fk\_product\_type\_cd foreign key (product\_type\_cd)

references product\_type (product\_type\_cd),

constraint pk\_product primary key (product\_cd));

**create table customer**

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

fed\_id varchar(12) not null,

cust\_type\_cd enum('I','B') not null,

address varchar(30),

city varchar(20),

state varchar(20),

postal\_code varchar(10),

constraint pk\_customer primary key (cust\_id));

**create table individual**

(cust\_id integer unsigned not null,

fname varchar(30) not null,

lname varchar(30) not null,

birth\_date date,

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

references customer (cust\_id),

constraint pk\_individual primary key (cust\_id));

**create table business**

(cust\_id integer unsigned not null,

name varchar(40) not null,

state\_id varchar(10) not null,

incorp\_date date,

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

references customer (cust\_id),

constraint pk\_business primary key (cust\_id));

**create table account**

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

product\_cd varchar(10) not null,

cust\_id integer unsigned not null,

open\_date date not null,

close\_date date,

last\_activity\_date date,

status enum('ACTIVE','CLOSED','FROZEN'),

open\_branch\_id smallint unsigned,

open\_emp\_id smallint unsigned,

avail\_balance float(10,2),

pending\_balance float(10,2),

constraint fk\_product\_cd foreign key (product\_cd)

references product (product\_cd),

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

references customer (cust\_id),

constraint fk\_a\_branch\_id foreign key (open\_branch\_id)

references branch (branch\_id),

constraint fk\_a\_emp\_id foreign key (open\_emp\_id)

references employee (emp\_id),

constraint pk\_account primary key (account\_id));

**insert into product\_type** (product\_type\_cd, name)

values ('ACCOUNT','Customer Accounts');

**insert into product\_type** (product\_type\_cd, name)

values ('LOAN','Individual and Business Loans');

**insert into product\_type** (product\_type\_cd, name)

values ('INSURANCE','Insurance Offerings');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('CHK','checking account','ACCOUNT','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('SAV','savings account','ACCOUNT','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('MM','money market account','ACCOUNT','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('CD','certificate of deposit','ACCOUNT','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('MRT','home mortgage','LOAN','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('AUT','auto loan','LOAN','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('BUS','business line of credit','LOAN','2000-01-01');

**insert into product** (product\_cd, name, product\_type\_cd, date\_offered)

values ('SBL','small business loan','LOAN','2000-01-01');

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '111-11-1111', 'I', '47 Mockingbird Ln', 'Lynnfield', 'MA', '01940');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'James', 'Hadley', '1972-04-22' from customer

where fed\_id = '111-11-1111';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '222-22-2222', 'I', '372 Clearwater Blvd', 'Woburn', 'MA', '01801');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Susan', 'Tingley', '1968-08-15' from customer

where fed\_id = '222-22-2222';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '333-33-3333', 'I', '18 Jessup Rd', 'Quincy', 'MA', '02169');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Frank', 'Tucker', '1958-02-06' from customer

where fed\_id = '333-33-3333';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '444-44-4444', 'I', '12 Buchanan Ln', 'Waltham', 'MA', '02451');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'John', 'Hayward', '1966-12-22' from customer

where fed\_id = '444-44-4444';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '555-55-5555', 'I', '2341 Main St', 'Salem', 'NH', '03079');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Charles', 'Frasier', '1971-08-25' from customer

where fed\_id = '555-55-5555';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '666-66-6666', 'I', '12 Blaylock Ln', 'Waltham', 'MA', '02451');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'John', 'Spencer', '1962-09-14' from customer

where fed\_id = '666-66-6666';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '777-77-7777', 'I', '29 Admiral Ln', 'Wilmington', 'MA', '01887');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Margaret', 'Young', '1947-03-19' from customer

where fed\_id = '777-77-7777';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '888-88-8888', 'I', '472 Freedom Rd', 'Salem', 'NH', '03079');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Louis', 'Blake', '1977-07-01' from customer

where fed\_id = '888-88-8888';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '999-99-9999', 'I', '29 Maple St', 'Newton', 'MA', '02458');

**insert into individual** (cust\_id, fname, lname, birth\_date)

select cust\_id, 'Richard', 'Farley', '1968-06-16' from customer

where fed\_id = '999-99-9999';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '04-1111111', 'B', '7 Industrial Way', 'Salem', 'NH', '03079');

**insert into business (**cust\_id, name, state\_id, incorp\_date)

select cust\_id, 'Chilton Engineering', '12-345-678', '1995-05-01' from customer

where fed\_id = '04-1111111';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '04-2222222', 'B', '287A Corporate Ave', 'Wilmington', 'MA', '01887');

**insert into business** (cust\_id, name, state\_id, incorp\_date)

select cust\_id, 'Northeast Cooling Inc.', '23-456-789', '2001-01-01' from customer

where fed\_id = '04-2222222';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '04-3333333', 'B', '789 Main St', 'Salem', 'NH', '03079');

**insert into business** (cust\_id, name, state\_id, incorp\_date)

select cust\_id, 'Superior Auto Body', '34-567-890', '2002-06-30' from customer

where fed\_id = '04-3333333';

**insert into customer** (cust\_id, fed\_id, cust\_type\_cd,

address, city, state, postal\_code)

values (null, '04-4444444', 'B', '4772 Presidential Way', 'Quincy', 'MA', '02169');

**insert into business** (cust\_id, name, state\_id, incorp\_date)

select cust\_id, 'AAA Insurance Inc.', '45-678-901', '1999-05-01' from customer

where fed\_id = '04-4444444';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Woburn' limit 1) e

cross join

(select 'CHK' prod\_cd, '2000-01-15' open\_date, '2005-01-04' last\_date,

1057.75 avail, 1057.75 pend union all

select 'SAV' prod\_cd, '2000-01-15' open\_date, '2004-12-19' last\_date,

500.00 avail, 500.00 pend union all

select 'CD' prod\_cd, '2004-06-30' open\_date, '2004-06-30' last\_date,

3000.00 avail, 3000.00 pend) a

where c.fed\_id = '111-11-1111';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Woburn' limit 1) e

cross join

(select 'CHK' prod\_cd, '2001-03-12' open\_date, '2004-12-27' last\_date,

2258.02 avail, 2258.02 pend union all

select 'SAV' prod\_cd, '2001-03-12' open\_date, '2004-12-11' last\_date,

200.00 avail, 200.00 pend) a

where c.fed\_id = '222-22-2222';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Quincy' limit 1) e

cross join

(select 'CHK' prod\_cd, '2002-11-23' open\_date, '2004-11-30' last\_date,

1057.75 avail, 1057.75 pend union all

select 'MM' prod\_cd, '2002-12-15' open\_date, '2004-12-05' last\_date,

2212.50 avail, 2212.50 pend) a

where c.fed\_id = '333-33-3333';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Waltham' limit 1) e

cross join

(select 'CHK' prod\_cd, '2003-09-12' open\_date, '2005-01-03' last\_date,

534.12 avail, 534.12 pend union all

select 'SAV' prod\_cd, '2000-01-15' open\_date, '2004-10-24' last\_date,

767.77 avail, 767.77 pend union all

select 'MM' prod\_cd, '2004-09-30' open\_date, '2004-11-11' last\_date,

5487.09 avail, 5487.09 pend) a

where c.fed\_id = '444-44-4444';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Salem' limit 1) e

cross join

(select 'CHK' prod\_cd, '2004-01-27' open\_date, '2005-01-05' last\_date,

2237.97 avail, 2897.97 pend) a

where c.fed\_id = '555-55-5555';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Waltham' limit 1) e

cross join

(select 'CHK' prod\_cd, '2002-08-24' open\_date, '2004-11-29' last\_date,

122.37 avail, 122.37 pend union all

select 'CD' prod\_cd, '2004-12-28' open\_date, '2004-12-28' last\_date,

10000.00 avail, 10000.00 pend) a

where c.fed\_id = '666-66-6666';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Woburn' limit 1) e

cross join

(select 'CD' prod\_cd, '2004-01-12' open\_date, '2004-01-12' last\_date,

5000.00 avail, 5000.00 pend) a

where c.fed\_id = '777-77-7777';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Salem' limit 1) e

cross join

(select 'CHK' prod\_cd, '2001-05-23' open\_date, '2005-01-03' last\_date,

3487.19 avail, 3487.19 pend union all

select 'SAV' prod\_cd, '2001-05-23' open\_date, '2004-10-12' last\_date,

387.99 avail, 387.99 pend) a

where c.fed\_id = '888-88-8888';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Waltham' limit 1) e

cross join

(select 'CHK' prod\_cd, '2003-07-30' open\_date, '2004-12-15' last\_date,

125.67 avail, 125.67 pend union all

select 'MM' prod\_cd, '2004-10-28' open\_date, '2004-10-28' last\_date,

9345.55 avail, 9845.55 pend union all

select 'CD' prod\_cd, '2004-06-30' open\_date, '2004-06-30' last\_date,

1500.00 avail, 1500.00 pend) a

where c.fed\_id = '999-99-9999';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Salem' limit 1) e

cross join

(select 'CHK' prod\_cd, '2002-09-30' open\_date, '2004-12-15' last\_date,

23575.12 avail, 23575.12 pend union all

select 'BUS' prod\_cd, '2002-10-01' open\_date, '2004-08-28' last\_date,

0 avail, 0 pend) a

where c.fed\_id = '04-1111111';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Woburn' limit 1) e

cross join

(select 'BUS' prod\_cd, '2004-03-22' open\_date, '2004-11-14' last\_date,

9345.55 avail, 9345.55 pend) a

where c.fed\_id = '04-2222222';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Salem' limit 1) e

cross join

(select 'CHK' prod\_cd, '2003-07-30' open\_date, '2004-12-15' last\_date,

38552.05 avail, 38552.05 pend) a

where c.fed\_id = '04-3333333';

**insert into account** (account\_id, product\_cd, cust\_id, open\_date,

last\_activity\_date, status, open\_branch\_id,

open\_emp\_id, avail\_balance, pending\_balance)

select null, a.prod\_cd, c.cust\_id, a.open\_date, a.last\_date, 'ACTIVE',

e.branch\_id, e.emp\_id, a.avail, a.pend

from customer c cross join

(select b.branch\_id, e.emp\_id

from branch b inner join employee e on e.assigned\_branch\_id = b.branch\_id

where b.city = 'Quincy' limit 1) e

cross join

(select 'SBL' prod\_cd, '2004-02-22' open\_date, '2004-12-17' last\_date,

50000.00 avail, 50000.00 pend) a

where c.fed\_id = '04-4444444';

1)Вивести імя прізвище та залишок на рахунку для всіх записів у яких статус «Active»

2)Вивести дані таблиці «працівники» у яких прізвище починається на «F»

3)Вивести інформацію про клієнтів номер рахунку яких закінчується на 1

4)Вивести інформацію про працівників з посадою «Teller»

5)Вивести всі дані таблиці транзакції

6)Вивести імя та прізвище працівник ків у яких немає керівника