CREATE TABLE clientes (

codigo SERIAL,

nome VARCHAR,

telefone INT,

limite\_compra REAL,

PRIMARY KEy(codigo)

);

CREATE TABLE pedido (

codigo SERIAL,

cod\_cli INT,

data\_pedido DATE,

valor REAL,

PRIMARY KEY(codigo),

FOREIGN KEY(cod\_cli) REFERENCES clientes(codigo) ON DELETE SET NULL);

CREATE TABLE itens (

codigo SERIAL,

cod\_ped INT,

qtd INT,

subtotal REAL,

PRIMARY KEY(codigo),

FOREIGN KEY(cod\_ped) REFERENCES pedido(codigo) ON DELETE SET NULL);

CREATE TABLE itens\_audit (

operacao VARCHAR NOT NULL,

data\_hora TIMESTAMP NOT NULL,

user\_id VARCHAR NOT NULL,

codigo SERIAL,

cod\_ped INT,

qtd INT,

subtotal REAL,

valor REAL);

CREATE TABLE clientes\_audit (

operacao VARCHAR NOT NULL,

data\_hora TIMESTAMP NOT NULL,

user\_id VARCHAR NOT NULL,

codigo SERIAL,

nome VARCHAR,

telefone INT,

limite\_compra REAL,

valor REAL);

CREATE TABLE pedido\_audit (

operacao VARCHAR NOT NULL,

data\_hora TIMESTAMP NOT NULL,

user\_id VARCHAR NOT NULL,

codigo INT,

cod\_cli INT,

data\_pedido DATE,

valor REAL);

create or replace function pedido\_audit\_data() returns trigger

as

$pedido\_audit$

begin

if (TG\_OP = 'DELETE') THEN

insert into pedido\_audit SELECT 'D', now(), user, OLD.\*;

elsif (TG\_OP = 'UPDATE') THEN

insert into pedido\_audit SELECT 'U', now(), user, NEW.\*;

elsif (TG\_OP = 'INSERT') THEN

insert into pedido\_audit SELECT 'I', now(), user, NEW.\*;

end if;

return null;

end;

$pedido\_audit$

language plpgsql;

create trigger pedido\_audit\_trigger

after insert or update or delete on pedido

for each row

execute procedure pedido\_audit\_data();

create or replace function clientes\_audit\_data() returns trigger

as

$pedido\_audit$

begin

if (TG\_OP = 'DELETE') THEN

insert into clientes\_audit SELECT 'D', now(), user, OLD.\*;

elsif (TG\_OP = 'UPDATE') THEN

insert into clientes\_audit SELECT 'U', now(), user, NEW.\*;

elsif (TG\_OP = 'INSERT') THEN

insert into clientes\_audit SELECT 'I', now(), user, NEW.\*;

end if;

return null;

end;

$clientes\_audit$

language plpgsql;

create trigger clientes\_audit\_trigger

after insert or update or delete on clientes

for each row

execute procedure clientes\_audit\_data();

create or replace function itens\_audit\_data() returns trigger

as

$itens\_audit$

begin

if (TG\_OP = 'DELETE') THEN

insert into itens\_audit SELECT 'D', now(), user, OLD.\*;

elsif (TG\_OP = 'UPDATE') THEN

insert into itens\_audit SELECT 'U', now(), user, NEW.\*;

elsif (TG\_OP = 'INSERT') THEN

insert into itens\_audit SELECT 'I', now(), user, NEW.\*;

end if;

return null;

end;

$itens\_audit$

language plpgsql;

create trigger itens\_audit\_trigger

after insert or update or delete on itens

for each row

execute procedure itens\_audit\_data();

INSERT INTO clientes (codigo,nome,telefone,limite\_compra) VALUES (

'202',

'Ernesto',

'32220809',

'1500'

);

INSERT INTO clientes (codigo,nome,telefone,limite\_compra) VALUES (

'221',

'Amelia',

'32332474',

'2000'

);

INSERT INTO clientes (codigo,nome,telefone,limite\_compra) VALUES (

'233',

'Luis Alberto',

'33230071',

'1500'

);

INSERT INTO clientes (codigo,nome,telefone,limite\_compra) VALUES (

'282',

'Jose Antonio',

'33439021',

'800'

);

INSERT INTO clientes (codigo,nome,telefone,limite\_compra) VALUES (

'295',

'Carlos Silva',

'32245678',

'800'

);

INSERT INTO pedido (codigo,cod\_cli,data\_pedido,valor) VALUES (

'1005',

'202',

'03/10/2004',

'1200'

);

INSERT INTO pedido (codigo,cod\_cli,data\_pedido,valor) VALUES (

'1008',

'221',

'03/13/2004',

'960'

);

INSERT INTO pedido (codigo,cod\_cli,data\_pedido,valor) VALUES (

'1010',

'233',

'03/17/2004',

'1020'

);

INSERT INTO pedido (codigo,cod\_cli,data\_pedido,valor) VALUES (

'1015',

'282',

'03/20/2004',

'755'

);

INSERT INTO pedido (codigo,cod\_cli,data\_pedido,valor) VALUES (

'1023',

'202',

'03/21/2004',

'900'

);

UPDATE pedido

SET codigo = '1010',

cod\_cli = '233',

data\_pedido = '03/17/2004',

valor = '500'

WHERE codigo = 1010;

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'001',

'1005',

'10',

'1200'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'002',

'1008',

'12',

'720'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'003',

'1008',

'2',

'240'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'004',

'1010',

'1',

'500'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'005',

'1010',

'2',

'335'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'006',

'1010',

'1',

'185'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'007',

'1015',

'1',

'125'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'008',

'1015',

'1',

'630'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'009',

'1023',

'1',

'400'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'010',

'1023',

'1',

'300'

);

INSERT INTO itens (codigo,cod\_ped,qtd,subtotal) VALUES (

'011',

'1023',

'1',

'200'

);