CREATE DATABASE CABLINE;

CREATE TABLE subscriber\_status(

subscriber\_status\_id SMALLINT NOT NULL AUTO\_INCREMENT,

description VARCHAR(50),

PRIMARY KEY(subscriber\_status\_id)

);

CREATE TABLE user\_status(

user\_status\_id SMALLINT NOT NULL AUTO\_INCREMENT,

description VARCHAR(50),

PRIMARY KEY(user\_status\_id)

);

CREATE TABLE subscribers(

subscriber\_id INT NOT NULL AUTO\_INCREMENT,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

contact\_phone INT,

registration\_date DATE,

comment\_ VARCHAR(255),

subscriber\_status\_id SMALLINT NOT NULL,

PRIMARY KEY(subscriber\_id),

FOREIGN KEY(subscriber\_status\_id) REFERENCES subscriber\_status(subscriber\_status\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE roles(

role\_id SMALLINT NOT NULL AUTO\_INCREMENT,

description VARCHAR(50),

PRIMARY KEY(role\_id)

);

CREATE TABLE services(

service\_id INT NOT NULL AUTO\_INCREMENT,

description VARCHAR(50),

PRIMARY KEY(service\_id)

);

CREATE TABLE users\_(

user\_id INT NOT NULL AUTO\_INCREMENT,

role\_id SMALLINT NOT NULL,

user\_status\_id SMALLINT NOT NULL,

user\_name VARCHAR(50),

password\_ VARCHAR(50),

first\_name VARCHAR(50),

last\_name VARCHAR(50),

contact\_phone INT,

registration\_date DATE,

PRIMARY KEY(user\_id),

FOREIGN KEY(role\_id) REFERENCES roles(role\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(user\_status\_id) REFERENCES user\_status(user\_status\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE state(

state\_id SMALLINT NOT NULL AUTO\_INCREMENT,

description VARCHAR(50),

PRIMARY KEY(state\_id)

);

CREATE TABLE ahk(

ahk\_id INT NOT NULL AUTO\_INCREMENT,

ahk\_num VARCHAR(50),

PRIMARY KEY(ahk\_id)

);

CREATE TABLE saves(

safe\_id INT NOT NULL AUTO\_INCREMENT,

ahk\_id INT NOT NULL,

street VARCHAR(50),

alley VARCHAR(50),

dead\_end VARCHAR(50),

building VARCHAR(50),

entrance VARCHAR(50),

PRIMARY KEY(safe\_id),

FOREIGN KEY(ahk\_id) REFERENCES ahk(ahk\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE boxes(

box\_id INT NOT NULL AUTO\_INCREMENT,

safe\_id INT NOT NULL,

box\_num VARCHAR(50),

PRIMARY KEY(box\_id),

FOREIGN KEY(safe\_id) REFERENCES saves(safe\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE shunts(

shunt\_id INT NOT NULL AUTO\_INCREMENT,

safe\_id INT NOT NULL,

shunt\_num VARCHAR(50),

PRIMARY KEY(shunt\_id),

FOREIGN KEY(safe\_id) REFERENCES saves(safe\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE rods(

rod\_id INT NOT NULL AUTO\_INCREMENT,

shunt\_id INT NOT NULL,

box\_id INT NOT NULL,

state\_id SMALLINT NOT NULL,

rod\_num VARCHAR(50),

shunt\_pair\_num VARCHAR(50),

box\_pair\_num VARCHAR(50),

PRIMARY KEY(rod\_id),

FOREIGN KEY(shunt\_id) REFERENCES shunts(shunt\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(box\_id) REFERENCES boxes(box\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(state\_id) REFERENCES state(state\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE phone\_numbers(

phone\_number\_id INT NOT NULL AUTO\_INCREMENT,

rod\_id INT NOT NULL,

subscriber\_id INT NOT NULL,

phone\_number INT,

street VARCHAR(50),

alley VARCHAR(50),

dead\_end VARCHAR(50),

building VARCHAR(50),

entrance VARCHAR(50),

state\_id SMALLINT NOT NULL,

PRIMARY KEY(phone\_number\_id),

FOREIGN KEY(rod\_id) REFERENCES rods(rod\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(subscriber\_id) REFERENCES subscribers(subscriber\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(state\_id) REFERENCES state(state\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE status\_service\_process(

status\_service\_process\_id SMALLINT NOT NULL AUTO\_INCREMENT,

description VARCHAR(255),

PRIMARY KEY(status\_service\_process\_id)

);

CREATE TABLE service\_process(

service\_process\_id INT NOT NULL AUTO\_INCREMENT,

service\_id INT NOT NULL,

status\_service\_process\_id SMALLINT NOT NULL,

user\_id INT NOT NULL,

subscriber\_id INT NOT NULL,

comment\_ VARCHAR(255),

PRIMARY KEY(service\_process\_id),

FOREIGN KEY(service\_id) REFERENCES services(service\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(status\_service\_process\_id) REFERENCES status\_service\_process(status\_service\_process\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(user\_id) REFERENCES users\_(user\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY(subscriber\_id) REFERENCES subscribers(subscriber\_id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO roles (description)

VALUES

('Administrator'),

('User'),

('Fitter');

INSERT INTO status\_service\_process(description)

VALUES

('Completed'),

('In process'),

('Denied');

INSERT INTO subscriber\_status(description)

VALUES

('Active'),

('Frozen'),

('Inactive');

INSERT INTO user\_status(description)

VALUES

('Accessible'),

('Temporary Inaccessible'),

('Inaccessible');

INSERT INTO services(description)

VALUES

('Installation'),

('Reinstallation'),

('Rename'),

('Number change'),

('Number removal'),

('Number recovery'),

('Box check');

INSERT INTO state(description)

VALUES

('Busy'),

('Free'),

('Crashed');

INSERT INTO subscribers(first\_name, last\_name, contact\_phone, registration\_date, comment\_, subscriber\_status\_id)

VALUES

(SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 10), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY, SUBSTRING(MD5(RAND()) FROM 1 FOR 20), (SELECT FLOOR(1+RAND()\*3))),

(SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 10), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY, SUBSTRING(MD5(RAND()) FROM 1 FOR 20), (SELECT FLOOR(1+RAND()\*3))),

(SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 10), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY, SUBSTRING(MD5(RAND()) FROM 1 FOR 20), (SELECT FLOOR(1+RAND()\*3))),

(SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 10), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY, SUBSTRING(MD5(RAND()) FROM 1 FOR 20), (SELECT FLOOR(1+RAND()\*3))),

(SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 10), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY, SUBSTRING(MD5(RAND()) FROM 1 FOR 20), (SELECT FLOOR(1+RAND()\*3)));

INSERT INTO users\_(role\_id, user\_status\_id, user\_name, password\_, first\_name, last\_name, contact\_phone, registration\_date)

VALUES

((SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 8 FOR 12), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY),

((SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 8 FOR 12), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY),

((SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 8 FOR 12), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY),

((SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 8 FOR 12), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY),

((SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 8 FOR 12), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), (SELECT FLOOR(100000+RAND()\*900000)), CURRENT\_DATE - INTERVAL FLOOR(RAND() \* 100) DAY);

INSERT INTO ahk(ahk\_num)

VALUES

(SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

(SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

(SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

(SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

(SUBSTRING(MD5(RAND()) FROM 2 FOR 5));

INSERT INTO saves(ahk\_id, street, alley, dead\_end, building, entrance)

VALUES

((SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2)),

((SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2)),

((SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2)),

((SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2)),

((SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2));

INSERT INTO boxes(safe\_id, box\_num)

VALUES

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5));

INSERT INTO shunts(safe\_id, shunt\_num)

VALUES

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5)),

((SELECT FLOOR(1+RAND()\*5)),SUBSTRING(MD5(RAND()) FROM 2 FOR 5));

INSERT INTO rods(shunt\_id, box\_id, state\_id, rod\_num, shunt\_pair\_num, box\_pair\_num)

VALUES

((SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 2 FOR 3),SUBSTRING(MD5(RAND()) FROM 2 FOR 3)),

((SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 2 FOR 3),SUBSTRING(MD5(RAND()) FROM 2 FOR 3)),

((SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 2 FOR 3),SUBSTRING(MD5(RAND()) FROM 2 FOR 3)),

((SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 2 FOR 3),SUBSTRING(MD5(RAND()) FROM 2 FOR 3)),

((SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*5)),(SELECT FLOOR(1+RAND()\*3)), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 2 FOR 3),SUBSTRING(MD5(RAND()) FROM 2 FOR 3));

INSERT INTO phone\_numbers(rod\_id, subscriber\_id, phone\_number, street, alley, dead\_end, building, entrance, state\_id)

VALUES

((SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(100000+RAND()\*900000)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2), (SELECT FLOOR(1+RAND()\*3))),

((SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(100000+RAND()\*900000)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2), (SELECT FLOOR(1+RAND()\*3))),

((SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(100000+RAND()\*900000)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2), (SELECT FLOOR(1+RAND()\*3))),

((SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(100000+RAND()\*900000)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2), (SELECT FLOOR(1+RAND()\*3))),

((SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(100000+RAND()\*900000)), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 5 FOR 7), SUBSTRING(MD5(RAND()) FROM 2 FOR 5), SUBSTRING(MD5(RAND()) FROM 1 FOR 3),SUBSTRING(MD5(RAND()) FROM 1 FOR 2), (SELECT FLOOR(1+RAND()\*3)));

INSERT INTO service\_process(service\_id, status\_service\_process\_id, user\_id, subscriber\_id, comment\_)

VALUES

((SELECT FLOOR(1+RAND()\*7)), (SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 1 FOR 20)),

((SELECT FLOOR(1+RAND()\*7)), (SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 1 FOR 20)),

((SELECT FLOOR(1+RAND()\*7)), (SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 1 FOR 20)),

((SELECT FLOOR(1+RAND()\*7)), (SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 1 FOR 20)),

((SELECT FLOOR(1+RAND()\*7)), (SELECT FLOOR(1+RAND()\*3)), (SELECT FLOOR(1+RAND()\*5)), (SELECT FLOOR(1+RAND()\*5)), SUBSTRING(MD5(RAND()) FROM 1 FOR 20));