CREATE TABLE users

(

id int GENERATED BY DEFAULT AS IDENTITY not null PRIMARY KEY,

fio varchar not null,

bank int not null

);

select \* from users;

drop table users;

--Проблема неповторяющегося чтения

insert into users (fio, bank) values ('Matvey', 200);

--В первой консоли

BEGIN TRANSACTION ISOLATION LEVEL READ COMMITTED;

select \* from users;

--Во второй консоли

/\*

BEGIN TRANSACTION ISOLATION LEVEL READ COMMITTED;

update users set bank=bank-10;

select \* from users;

COMMIT;

\*/

update users set bank=bank-200;

select \* from users;

--Ошибка, меняем на BEGIN TRANSACTION ISOLATION LEVEL REPEATABLE READ;

COMMIT;

--Проблема фантомного чтения

insert into users (fio, bank) values ('Stas', 120);

insert into users (fio, bank) values ('Pasha', 230);

insert into users (fio, bank) values ('Andrey', 50);

BEGIN TRANSACTION ISOLATION LEVEL READ COMMITTED;

select \* from users;

--Во второй консоли

/\*

BEGIN TRANSACTION ISOLATION LEVEL READ COMMITTED;

insert into users (fio, bank) values ('Oleg', 300);

COMMIT;

\*/

select \* from users;

--Ошибка, меняем на BEGIN TRANSACTION ISOLATION LEVEL REPEATABLE READ;

COMMIT;

--SERIALIZABLE

insert into users (fio, bank) values ('Stas', 120);

insert into users (fio, bank) values ('Pasha', 230);

insert into users (fio, bank) values ('Andrey', 50);

BEGIN TRANSACTION ISOLATION LEVEL REPEATABLE READ;

BEGIN TRANSACTION ISOLATION LEVEL SERIALIZABLE;

select \* from users;

update users set bank = bank + 15 where fio = 'Andrey';

select sum(bank) from users;

--Во второй консоли

/\*

BEGIN TRANSACTION ISOLATION LEVEL REPEATABLE READ;

select \* from users;

update users set bank = bank + 10 where fio = 'Stas';

select sum(bank) from users;

COMMIT;

\*/

select \* from users;

--Ошибка, меняем на BEGIN TRANSACTION ISOLATION LEVEL SERIALIZABLE;

COMMIT;