

Exercise 1. Part 1.

```
CREATE TABLE accounts(
    id integer UNIQUE NOT NULL,
    name varchar(50) NOT NULL,
    credit integer);
INSERT INTO accounts VALUES
    (1, 'Polina', 1000),
    (2, 'Emil', 1000),
    (3, 'Ruslan', 1000);
BEGIN TRANSACTION;
    SAVEPOINT T1;
    UPDATE accounts SET credit=credit-500 WHERE id=1;
    UPDATE accounts SET credit=credit+500 WHERE id=3;

    UPDATE accounts SET credit=credit-700 WHERE id=2;
    UPDATE accounts SET credit=credit+700 WHERE id=1;

    UPDATE accounts SET credit=credit-100 WHERE id=2;
    UPDATE accounts SET credit=credit+100 WHERE id=3;
ROLLBACK TO T1;
SELECT * FROM accounts;
```

Created table:

	id integer	name character varying (50)	credit integer
1	1	Polina	1000
2	2	Emil	1000
3	3	Ruslan	1000

Before rollback:

	id integer	name character varying (50)	credit integer
1	1	Polina	1200
2	2	Emil	200
3	3	Ruslan	1600

After rollback:

	id integer	name character varying (50)	credit integer
1	1	Polina	1000
2	2	Emil	1000
3	3	Ruslan	1000

Exercise 1. Part 2.

```
ALTER TABLE accounts
    ADD COLUMN bankname varchar(20);
UPDATE accounts SET bankname = 'SberBank' WHERE id = 1 or id = 3;
UPDATE accounts SET bankname = 'Tinkoff' WHERE id = 2;
INSERT INTO accounts VALUES(4, 'fee', 30);
BEGIN TRANSACTION;
SAVEPOINT T2;
UPDATE accounts SET credit=credit-500 WHERE id=1;
UPDATE accounts SET credit=credit+500 WHERE id=3;

UPDATE accounts SET credit=credit-730 WHERE id=2;
UPDATE accounts SET credit=credit+700 WHERE id=1;

UPDATE accounts SET credit=credit-130 WHERE id=2;
UPDATE accounts SET credit=credit+100 WHERE id=3;
ROLLBACK TO T1;
SELECT * FROM accounts;
```

Before rollback:

Data Output							Explain	Messages	Notifications
	id integer	🔒	name character varying (50)	🔒	credit integer	🔒	bankname character varying	🔒	
1		4	fee		30	[null]			
2		1	Polina		1200	Spearbank			
3		2	Emil		140	Tinkoff			
4		3	Ruslan		1600	Spearbank			

After rollback:

	id integer	🔒	name character varying (50)	🔒	credit integer	🔒
1		1	Polina		1000	
2		2	Emil		1000	
3		3	Ruslan		1000	