


## 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