Лабораторная работа 1.4

Транзакция 1	Транзакция 2
READ UNCOMMITTED	
Потерянные изменения	
SELECT price FROM medicaments WHERE id_medicament = 14;	
SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED; BEGIN;

UPDATE medicaments
    SET price = price + 100
        WHERE id_medicament = 14;	

	UPDATE medicaments
	    SET price = price + 100
	        WHERE id_medicament = 14;

COMMIT;	
	COMMIT;
SELECT price FROM medicaments WHERE id_medicament = 14;	
Грязное чтение	
SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED; BEGIN;
SELECT price FROM medicaments WHERE id_medicament = 14;	

	UPDATE medicaments
	    SET price = price + 100
	        WHERE id_medicament = 14;

SELECT price FROM medicaments WHERE id_medicament = 14;	
	ROLLBACK;
SELECT price FROM medicaments WHERE id_medicament = 14;	
COMMIT;	
	COMMIT;
READ COMMITTED	

Грязное чтение	
SET TRANSACTION ISOLATION LEVEL READ COMMITTED; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL READ COMMITTED; BEGIN;
SELECT price FROM medicaments WHERE id_medicament = 14;	
	UPDATE medicaments SET price = price + 100 WHERE id_medicament = 14;
SELECT price FROM medicaments WHERE id_medicament = 14;	
	ROLLBACK;
SELECT price FROM medicaments WHERE id_medicament = 14;	
COMMIT;	
	COMMIT;
Неповторяемое чтение	
SET TRANSACTION ISOLATION LEVEL READ COMMITTED; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL READ COMMITTED; BEGIN;
SELECT price FROM medicaments WHERE id_medicament = 14;	
	UPDATE medicaments SET price = price + 100 WHERE id_medicament = 14;
	COMMIT;
SELECT price FROM medicaments WHERE id_medicament = 14;	
COMMIT;	
REPEATABLE READ	
Неповторяемое чтение	
SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;

SELECT price FROM medicaments WHERE id_medicament = 14;	

	UPDATE medicaments
	        SET price = price + 100
	                WHERE id_medicament = 14;

	COMMIT;
SELECT price FROM medicaments WHERE id_medicament = 14;	
COMMIT;	
Фантомное чтение	
SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;

SELECT COUNT(id_order) AS count FROM orders
        JOIN customers ON orders.customer = customers.id_customer
                WHERE name = 'Аптека Шексна';	

	DELETE FROM orders WHERE id_order = 3;
	COMMIT;

SELECT COUNT(id_order) AS count FROM orders
        JOIN customers ON orders.customer = customers.id_customer
                WHERE name = 'Аптека Шексна';	

COMMIT;	
SERIALIZABLE	
Фантомное чтение	
SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;
SELECT COUNT(id_order) AS count FROM orders	

JOIN customers ON orders.customer = customers.id_customer WHERE name = 'Аптека Шексна';	
	DELETE FROM orders WHERE id_order = 3;
	COMMIT;
SELECT COUNT(id_order) AS count FROM orders JOIN customers ON orders.customer = customers.id_customer WHERE name = 'Аптека Шексна';	
COMMIT;	
READ COMMITTED	
Фантомное чтение	
SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;	
	SET TRANSACTION ISOLATION LEVEL REPEATABLE READ; BEGIN;
SELECT COUNT(id_order) AS count FROM orders JOIN customers ON orders.customer = customers.id_customer WHERE name = 'Аптека Шексна';	
	DELETE FROM orders WHERE id_order = 3;
	COMMIT;
SELECT COUNT(id_order) AS count FROM orders JOIN customers ON orders.customer = customers.id_customer WHERE name = 'Аптека Шексна';	
COMMIT;	