## 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;                               | A DD A DD A                     |  |
|   | UPDATE medicaments              |  |
|   | SET price = price + 100         |  |
| COMMIT  | WHERE id_medicament = 14;       |  |
| COMMIT;   | COMMIT                          |  |
| CELECT EDOM 1'  | COMMIT;                         |  |
| SELECT price FROM medicaments WHERE id medicament = 14; |                                 |  |
| WHERE Id_Inedicament = 14,                              |                                 |  |
| Гразион   | г чтение                        |  |
| SET TRANSACTION ISOLATION LEVEL                         | menue                           |  |
| 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;                         |  |
| DE AD COMMITTED   |                                 |  |
| READ COMMITTED  |                                 |  |

| Гразила                         | г чтение                                |
|---------------------------------|---|
| SET TRANSACTION ISOLATION LEVEL | - Amenue                                |
|                                 |   |
| READ COMMITTED;                 |   |
| BEGIN;                          |   |
|                                 | SET TRANSACTION ISOLATION LEVEL         |
|                                 | READ COMMITTED;                         |
|                                 | BEGIN;                                  |
| SELECT price FROM medicaments   |   |
| WHERE id medicament = 14;       |   |
|                                 | UPDATE medicaments                      |
|                                 | SET price = price + 100                 |
|                                 | 1 1                                     |
| GEVECE ' FROM "                 | WHERE id_medicament = 14;               |
| SELECT price FROM medicaments   |   |
| WHERE id_medicament = 14;       |   |
|                                 | ROLLBACK;                               |
| SELECT price FROM medicaments   |   |
| WHERE id_medicament = 14;       |   |
| COMMIT;                         |   |
|                                 | COMMIT;                                 |
|                                 |   |
| 11                              |   |
|                                 | емое чтение<br>1                        |
| SET TRANSACTION ISOLATION LEVEL |   |
| READ COMMITTED;                 |   |
| BEGIN;                          |   |
|                                 | SET TRANSACTION ISOLATION LEVEL         |
|                                 | READ COMMITTED;                         |
|                                 | BEGIN;                                  |
| SELECT price FROM medicaments   | ,                                       |
| WHERE id medicament = 14;       |   |
| WILKE Id_Incurcament 14,        | UPDATE medicaments                      |
|                                 |   |
|                                 | SET price = price + 100                 |
|                                 | WHERE id_medicament = 14;               |
|                                 | COMMIT;                                 |
| SELECT price FROM medicaments   |   |
| WHERE id_medicament = 14;       |   |
| COMMIT;                         |   |
|                                 | 1                                       |
| REPEATA                         | BLE READ                                |
|                                 | емое чтение                             |
| SET TRANSACTION ISOLATION LEVEL |   |
|                                 |   |
| REPEATABLE READ;                |   |
| BEGIN;                          |   |
|                                 | SET TRANSACTION ISOLATION LEVEL         |
|                                 | REPEATABLE READ;                        |
|                                 | BEGIN;                                  |
|                                 | 1 * * * * * * * * * * * * * * * * * * * |

| SELECT price FROM medicaments         |                                 |
|---------------------------------------|---------------------------------|
| WHERE id medicament = 14;             |                                 |
| WHERE Id_Intedicament = 14,           | LIDDATE 1'                      |
|                                       | UPDATE medicaments              |
|                                       | SET price = price + 100         |
|                                       | WHERE id_medicament = 14;       |
|                                       | COMMIT;                         |
| SELECT price FROM medicaments         |                                 |
| WHERE id_medicament = 14;             |                                 |
| COMMIT;                               |                                 |
|                                       |                                 |
| Фантомн                               | ое 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               |                                 |
| —<br>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;                               |                                 |
|                                       |                                 |
| CEDIAI                                | IZABLE                          |
|                                       | ое чтение                       |
| SET TRANSACTION ISOLATION LEVEL       | oc menue                        |
| REPEATABLE READ;                      |                                 |
| BEGIN;                                |                                 |
| DEGIT,                                | SET TRANSACTION ISOLATION LEVEL |
|                                       | REPEATABLE READ;                |
|                                       | BEGIN;                          |
| SELECT COLINTGA and an AS assume EDOM | DLUIN,                          |
| SELECT COUNT(id_order) AS count FROM  |                                 |
| orders                                |                                 |

| TODY ON 1                            |                                 |
|--------------------------------------|---------------------------------|
| 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;                              |                                 |
| COMMIT,                              |                                 |
| DEAD CO.                             |                                 |
|                                      | MMITTED                         |
|                                      | ое 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                 |                                 |
| WILKE паше – Аптека<br>Шексна';      |                                 |
| HICKORA,                             | DELETE FROM orders              |
|                                      |                                 |
|                                      | WHERE id_order = 3;             |
| GDI FOR COLDINAL 1                   | COMMIT;                         |
| SELECT COUNT(id_order) AS count FROM |                                 |
| orders                               |                                 |
| JOIN customers ON orders.customer    |                                 |
| = customers.id_customer              |                                 |
| WHERE name = 'Аптека                 |                                 |
| Шексна';                             |                                 |
| COMMIT;                              |                                 |