--- 11 лаба

-- 1 задание

set nocount on

if exists (select \* from SYS.OBJECTS where OBJECT\_ID= object\_id(N'DBO.MyTable'))

drop table MyTable;

DECLARE @rows int;

SET IMPLICIT\_TRANSACTIONS ON;

CREATE table MyTable(

X int UNIQUE

);

INSERT INTO MyTable VALUES

(1),(2),(3),(4);

SET @rows = (SELECT COUNT(\*) FROM MyTable);

print 'Количество строк в таблице MyTable: ' + cast(@rows as varchar(5));

if @rows < 5

commit;

else

rollback;

SET IMPLICIT\_TRANSACTIONS OFF;

if exists (select \* from SYS.OBJECTS where OBJECT\_ID = object\_id(N'DBO.MyTable'))

print 'таблица MyTable есть';

else

print 'таблицы MyTable нет';

-- 2 задание

use UNIVER;

BEGIN try

BEGIN tran

DELETE SUBJECT\_T WHERE SUBJECT\_T LIKE 'test\_subj%';

INSERT INTO SUBJECT\_T VALUES('test\_subj5', 'test\_subj5', 'ИСиТ');

UPDATE dbo.SUBJECT\_T

SET SUBJECT\_T.SUBJECT\_NAME = SUBJECT\_T.SUBJECT\_NAME + '(upd)'

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';

SELECT \*

FROM dbo.SUBJECT\_T;

RAISERROR('Test error', 1, 1);

commit tran;

END try

BEGIN catch

print 'Ошибка: ' + cast(error\_number() as varchar(5))

print 'Line: ' + cast(error\_line() as varchar(5))

print 'Message: ' + error\_message();

if @@TRANCOUNT > 0

rollback tran;

END catch;

-- 3 задание

DECLARE @checkpoint varchar(10);

BEGIN try

BEGIN transaction

DELETE SUBJECT\_T WHERE SUBJECT\_T LIKE 'test\_subj%';

SET @checkpoint = 'checkpoint1'; SAVE transaction @checkpoint;

INSERT INTO SUBJECT\_T VALUES('test\_subj5', 'test\_subj5', 'ИСиТ');

SET @checkpoint = 'checkpoint2'; SAVE transaction @checkpoint;

UPDATE dbo.SUBJECT\_T

SET SUBJECT\_T.SUBJECT\_NAME = SUBJECT\_T.SUBJECT\_NAME + '(upd)'

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';

SET @checkpoint = 'checkpoint3'; SAVE transaction @checkpoint;

SELECT \*

FROM dbo.SUBJECT\_T;

commit transaction;

END try

BEGIN catch

print 'Ошибка: ' + cast(error\_number() as varchar(5))

print 'Line: ' + cast(error\_line() as varchar(5))

print 'Message: ' + error\_message();

if @@TRANCOUNT > 0

BEGIN

print 'Контрольная точка: ' + @checkpoint;

rollback transaction @checkpoint;

commit transaction;

END;

END catch;

-- 4 задание

--- A ---

SET transaction isolation level READ UNCOMMITTED;

BEGIN transaction

SELECT @@SPID 'SPID', 'insert SUBJECT' 'результат', \*

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.PULPIT = 'ИСиТ';

--- t1 ---

SELECT

@@SPID 'SPID',

'update AUDITORIUM' 'результат',

AUDITORIUM\_NAME,

AUDITORIUM\_TYPE,

AUDITORIUM\_CAPACITY

FROM dbo.AUDITORIUM

WHERE AUDITORIUM.AUDITORIUM\_TYPE LIKE 'ЛК%';

commit;

--- t2 ---

--- B ---

set transaction isolation level READ COMMITTED

begin transaction

SELECT @@SPID 'SPID';

INSERT into dbo.SUBJECT\_T values('test\_subj6', 'test\_subj\_tran', 'ИСиТ');

UPDATE AUDITORIUM SET AUDITORIUM.AUDITORIUM\_CAPACITY = 22

FROM dbo.AUDITORIUM

WHERE AUDITORIUM.AUDITORIUM = '301-1';

--- t1 ---

--- t2 ---

rollback;

-- 5 задание

--- A ---

set transaction isolation level READ COMMITTED

begin transaction

select count(\*) [count] from AUDITORIUM where AUDITORIUM\_CAPACITY >= 30;

--- t1 ---

--- t2 ---

select

@@SPID 'SID',

'update AUDITORIUM' 'результат',

AUDITORIUM\_NAME,

AUDITORIUM\_TYPE,AUDITORIUM\_CAPACITY

from AUDITORIUM

where AUDITORIUM\_NAME = '301-1';

commit;

--- B ---

begin transaction

--- t1 ---

update AUDITORIUM set AUDITORIUM\_CAPACITY = 30 where AUDITORIUM\_NAME = '301-1';

commit;

--- t2 ---

--- 6 задание

--- A ---

set transaction isolation level REPEATABLE READ

begin transaction

select SUBJECT\_NAME from SUBJECT\_T where SUBJECT\_T = 'test\_subj6';

--- t1 ---

--- t2 ---

select case

when SUBJECT\_T = 'test\_subj6' then 'insert SUBJECT' else '-'

end 'результат',

SUBJECT\_NAME

FROM SUBJECT\_T

WHERE PULPIT = 'ИСиТ';

commit;

--- B ---

begin transaction

--- t1 ---

INSERT into dbo.SUBJECT\_T values('test\_subj6', 'test\_subj6', 'ИСиТ');

commit;

--- t2 ---

-- 7 задание

set transaction isolation level SERIALIZABLE;

--- A ---

BEGIN transaction

DELETE SUBJECT\_T WHERE SUBJECT\_T LIKE 'test\_subj%';

INSERT INTO SUBJECT\_T VALUES('test\_subj7', 'test\_subj7', 'ИСиТ');

UPDATE dbo.SUBJECT\_T

SET SUBJECT\_T.SUBJECT\_NAME = SUBJECT\_T.SUBJECT\_NAME + '(upd)'

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';

--- t1 ---

SELECT SUBJECT\_T from SUBJECT\_T where SUBJECT\_T LIKE 'test\_subj%';

--- t2 ---

commit;

--- B ---

BEGIN transaction

delete SUBJECT\_T where SUBJECT\_T LIKE 'test\_subj%';

INSERT INTO SUBJECT\_T VALUES('test\_subj7', 'test\_subj7', 'ИСиТ');

UPDATE dbo.SUBJECT\_T

SET SUBJECT\_T.SUBJECT\_NAME = SUBJECT\_T.SUBJECT\_NAME + '(upd)'

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';

SELECT SUBJECT\_T from SUBJECT\_T where SUBJECT\_T LIKE 'test\_subj%';

--- t1 ---

commit;

SELECT SUBJECT\_T from SUBJECT\_T where SUBJECT\_T LIKE 'test\_subj%';

--- t2 ---

--- 8 задание

use UNIVER;

SET nocount on;

BEGIN transaction

INSERT INTO SUBJECT\_T VALUES('test\_subj8', 'test\_subj8', 'ИСиТ');

BEGIN transaction

UPDATE dbo.SUBJECT\_T

SET SUBJECT\_T.SUBJECT\_NAME = SUBJECT\_T.SUBJECT\_NAME + '(upd)'

FROM dbo.SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';

commit;

if @@TRANCOUNT > 0

rollback;

SELECT \*

FROM SUBJECT\_T

WHERE SUBJECT\_T.SUBJECT\_NAME LIKE 'test\_subj%';\_\_