--- 15 лаба

--- 1 задание

use UNIVER;

set nocount on;

go

SELECT \* from TEACHER

where PULPIT = 'ИСиТ'

FOR xml PATH('TEACHER'), root('Преподаватели\_ИСиТ'), elements;

--- 2 задание

use UNIVER;

set nocount on;

go

SELECT

AUDITORIUM.AUDITORIUM\_NAME,

AUDITORIUM.AUDITORIUM\_TYPE,

AUDITORIUM.AUDITORIUM\_CAPACITY

FROM AUDITORIUM\_TYPE

JOIN AUDITORIUM ON AUDITORIUM\_TYPE.AUDITORIUM\_TYPE = AUDITORIUM.AUDITORIUM\_TYPE

WHERE AUDITORIUM.AUDITORIUM\_TYPE like 'ЛК%'

for xml AUTO, root('Лекционные\_аудитории'), elements;

--- 3 задание

use UNIVER;

set nocount on;

go

declare @h int = 0,

@x varchar(2000) =

'<?xml version="1.0" encoding="windows-1251" ?>

<SUBJECTS>

<SUBJECT\_T SUBJECT\_T="new\_subj1" SUBJECT\_NAME="new\_subj1" PULPIT="ИСиТ" />

<SUBJECT\_T SUBJECT\_T="new\_subj2" SUBJECT\_NAME="new\_subj2" PULPIT="ИСиТ" />

<SUBJECT\_T SUBJECT\_T="new\_subj3" SUBJECT\_NAME="new\_subj3" PULPIT="ИСиТ" />

</SUBJECTS>';

exec sp\_xml\_preparedocument @h output, @x;

insert SUBJECT\_T select [SUBJECT\_T], [SUBJECT\_NAME], [PULPIT]

from openxml(@h, '/SUBJECTS/SUBJECT\_T', 0)

with([SUBJECT\_T] nvarchar(10), [SUBJECT\_NAME] nvarchar(100), [PULPIT] nvarchar(20))

exec sp\_xml\_removedocument @h;

--- 4 задание

use UNIVER

INSERT INTO STUDENT(IDGROUP, NAME, BDAY, INFO) values

(2, 'test', '1970-01-01',

'<паспорт>

<серия>1</серия>

<номер>123456</номер>

<дата\_выдачи>1980-01-01</дата\_выдачи>

<адрес>Беларусь, г. Минск, Свердлова 13а</адрес>

</паспорт>');

select \* from STUDENT where NAME = 'test';

update STUDENT set INFO =

'<паспорт>

<серия>2</серия>

<номер>654321</номер>

<дата\_выдачи>1981-01-01</дата\_выдачи>

<адрес>Беларусь, г. Минск, Свердлова 13а</адрес>

</паспорт>'

where STUDENT.INFO.value('(/паспорт/серия)[1]','int') = 1;

select \* from STUDENT where NAME = 'test';

select NAME,

INFO.value('(/паспорт/дата\_выдачи)[1]', 'date') [дата\_выдачи],

INFO.value('(/паспорт/адрес)[1]', 'varchar(100)') [адрес],

INFO.query('/паспорт') [паспорт]

from STUDENT where NAME = 'test';

--- 5 задание

use UNIVER;

drop xml schema collection Student\_info;

create xml schema collection Student\_info as

N'<?xml version="1.0" encoding="utf-16" ?>

<xs:schema attributeFormDefault="unqualified"

elementFormDefault="qualified"

xmlns:xs="http://www.w3.org/2001/XMLSchema">

<xs:element name="студент">

<xs:complexType><xs:sequence>

<xs:element name="паспорт" maxOccurs="1" minOccurs="1">

<xs:complexType>

<xs:attribute name="серия" type="xs:string" use="required" />

<xs:attribute name="номер" type="xs:unsignedInt" use="required"/>

<xs:attribute name="дата" use="required" >

<xs:simpleType> <xs:restriction base ="xs:string">

<xs:pattern value="[0-9]{2}.[0-9]{2}.[0-9]{4}"/>

</xs:restriction> </xs:simpleType>

</xs:attribute> </xs:complexType>

</xs:element>

<xs:element maxOccurs="3" name="телефон" type="xs:unsignedInt"/>

<xs:element name="адрес"> <xs:complexType><xs:sequence>

<xs:element name="страна" type="xs:string" />

<xs:element name="город" type="xs:string" />

<xs:element name="улица" type="xs:string" />

<xs:element name="дом" type="xs:string" />

<xs:element name="квартира" type="xs:string" />

</xs:sequence></xs:complexType> </xs:element>

</xs:sequence></xs:complexType>

</xs:element>

</xs:schema>';

alter table STUDENT alter column INFO xml(Student\_info);

drop XML SCHEMA COLLECTION Student\_info;