

Лабораторная работа №1

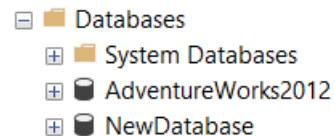
Задание №1

1. Создание новой базы данных с именем NewDatabase:

```
USE master;  
GO
```

```
CREATE DATABASE NewDatabase;  
GO
```

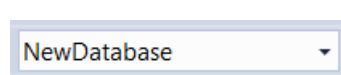
Messages
Commands completed successfully.



2. Изменение имени рабочей базы данных на NewDatabase:

```
USE NewDatabase;  
GO
```

Messages
Commands completed successfully.



3. Создание новой схемы sales:

```
CREATE SCHEMA sales;  
GO
```

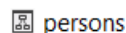
Messages
Commands completed successfully.



4. Создание новой схемы persons:

```
CREATE SCHEMA persons;  
GO
```

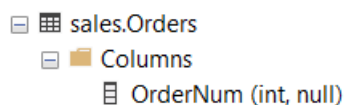
Messages
Commands completed successfully.



5. Создание новой таблицы в схеме sales с именем Orders, содержащей одно поле OrderNum, тип данных которого INT:

```
CREATE TABLE sales.Orders (OrderNum INT NULL);  
GO
```

Messages
Commands completed successfully.



6. Создание бэкапа базы данных NewDatabase:

```
BACKUP DATABASE NewDatabase TO DISK = 'D:\db\Anya_Beliatskaya.bak';  
GO
```

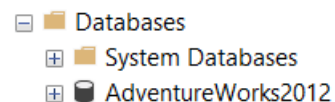
Messages
Processed 328 pages for database 'NewDatabase', file 'NewDatabase' on file 2.
Processed 6 pages for database 'NewDatabase', file 'NewDatabase_log' on file 2.
BACKUP DATABASE successfully processed 334 pages in 0.463 seconds (5.635 MB/sec).

7. Удаление базы данных NewDatabase:

```
USE MASTER;  
GO
```

```
DROP DATABASE NewDatabase;  
GO
```

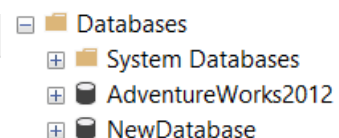
Messages
Commands completed successfully.



8. Восстановление базы данных NewDatabase из сохраненного бэкапа:

```
RESTORE DATABASE NewDatabase FROM DISK = 'D:\db\Anya_Beliatskaya.bak';  
GO
```

Messages
Processed 320 pages for database 'NewDatabase', file 'NewDatabase' on file 1.
Processed 6 pages for database 'NewDatabase', file 'NewDatabase_log' on file 1.
RESTORE DATABASE successfully processed 326 pages in 0.155 seconds (16.431 MB/sec).



- [-] NewDatabase
 - [+] Database Diagrams
 - [-] Tables
 - [+] System Tables
 - [+] FileTables
 - [-] sales.Orders
 - [-] Columns
 - OrderNum (int, null)
 - [+] Keys
 - [+] Constraints
 - [+] Triggers
 - [+] Indexes
 - [+] Statistics
 - [+] Views
 - [+] Synonyms
 - [+] Programmability
 - [+] Service Broker
 - [+] Storage
 - [-] Security
 - [+] Users
 - [+] Roles
 - [-] Schemas
 - db_accessadmin
 - db_backupoperator
 - db_datareader
 - db_datawriter
 - db_ddladmin
 - db_denydatareader
 - db_denydatawriter
 - db_owner
 - db_securityadmin
 - dbo
 - guest
 - INFORMATION_SCHEMA
 - persons
 - sales
 - sys
 - [+] Asymmetric Keys
 - [+] Certificates
 - [+] Symmetric Keys

Задание №2

Вариант 2

1. Вывести на экран список отделов, отсортированных по названию отдела в порядке Z-A. Вывести на экран только 5 строк, начиная с 3-ей строки:

```
SELECT DepartmentID, Name
FROM HumanResources.Department
ORDER BY Name DESC OFFSET 2 ROWS FETCH NEXT 5 ROWS ONLY;
GO
```

	DepartmentID	Name
1	3	Sales
2	6	Research and Development
3	13	Quality Assurance
4	5	Purchasing
5	8	Production Control

2. Вывести на экран список неповторяющихся позиций, которые соответствуют первому уровню позиций в организации (OrganizationLevel):

```
SELECT DISTINCT JobTitle
FROM HumanResources.Employee
WHERE OrganizationLevel = 1;
GO
```

	JobTitle
1	Chief Financial Officer
2	Information Services Manager
3	Marketing Manager
4	Vice President of Engineering
5	Vice President of Production
6	Vice President of Sales

3. Вывести на экран сотрудников, которым исполнилось 18 лет в тот год, когда их приняли на работу:

```
SELECT TOP 5 BusinessEntityID, JobTitle, Gender, BirthDate, HireDate
FROM HumanResources.Employee
WHERE YEAR(HireDate) - 18 = YEAR(BirthDate);
GO
```

	BusinessEntityID	JobTitle	Gender	BirthDate	HireDate
1	69	Production Technician - WC60	M	1985-05-07	2003-03-19
2	115	Production Technician - WC50	F	1985-07-01	2003-02-21
3	133	Production Technician - WC40	M	1985-02-04	2003-02-11