

Лабораторная работа №1

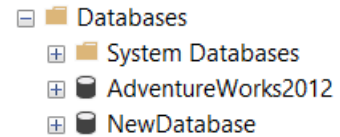
Задание №1

1. Создание новой базы данных с именем NewDatabase:

```
USE master;  
GO
```

```
CREATE DATABASE NewDatabase;  
GO
```

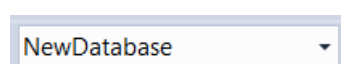
Messages
Commands completed successfully.



2. Изменение имени рабочей базы данных на NewDatabase:

```
USE NewDatabase;  
GO
```

Messages
Commands completed successfully.



3. Создание новой схемы sales:

```
CREATE SCHEMA sales;  
GO
```

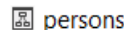
Messages
Commands completed successfully.



4. Создание новой схемы persons:

```
CREATE SCHEMA persons;  
GO
```

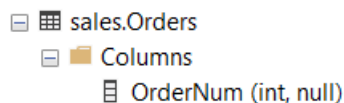
Messages
Commands completed successfully.



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
```

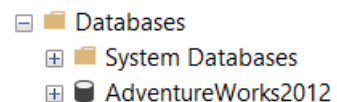
Messages
Processed 328 pages for database 'NewDatabase', file 'NewDatabase' on file 2.
Processed 6 pages for database 'NewDatabase', file 'NewDatabase_log' on file 2.
BACKUP DATABASE successfully processed 334 pages in 0.463 seconds (5.635 MB/sec).

7. Удаление базы данных NewDatabase:

```
USE MASTER;  
GO
```

```
DROP DATABASE NewDatabase;  
GO
```

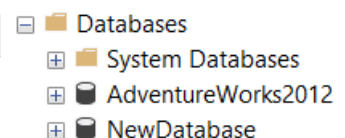
Messages
Commands completed successfully.



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 1

1. Вывести на экран сотрудников, позиция которых находится в списке: 'Accounts Manager', 'Benefits Specialist', 'Engineering Manager', 'Finance Manager', 'Maintenance Supervisor', 'Master Scheduler', 'Network Manager':

```
SELECT BusinessEntityID, JobTitle, Gender, HireDate
FROM HumanResources.Employee
WHERE JobTitle IN
('Accounts Manager', 'Benefits Specialist', 'Engineering Manager',
'Finance Manager', 'Maintenance Supervisor', 'Master Scheduler', 'Network Manager');
GO
```

	BusinessEntityID	JobTitle	Gender	HireDate
1	3	Engineering Manager	M	2001-12-12
2	222	Master Scheduler	M	2003-01-13
3	228	Maintenance Supervisor	M	2003-01-15
4	239	Benefits Specialist	F	2003-01-26
5	241	Accounts Manager	M	2003-03-03
6	249	Finance Manager	F	2003-01-26
7	264	Network Manager	F	2003-03-08

2. Вывести на экран количество сотрудников, принятых на работу позже 2004 года (включая 2004 год).

```
SELECT COUNT(*) AS EmpCount
FROM HumanResources.Employee
WHERE YEAR(HireDate) >= 2004;
GO
```

	EmpCount
1	73

3. Вывести на экран 5(пять) самых молодых сотрудников, состоящих в браке, которые были приняты на работу в 2004 году.

```
SELECT TOP 5 BusinessEntityID, JobTitle, MaritalStatus, Gender, BirthDate, HireDate
FROM HumanResources.Employee
WHERE MaritalStatus = 'M' and YEAR(HireDate) = 2004
ORDER BY BirthDate desc;
GO
```

	BusinessEntityID	JobTitle	MaritalStatus	Gender	BirthDate	HireDate
1	92	Production Technician - WC10	M	M	1980-11-01	2004-04-10
2	107	Production Technician - WC10	M	M	1980-11-01	2004-03-11
3	104	Production Technician - WC10	M	F	1980-10-20	2004-01-26
4	54	Production Technician - WC10	M	F	1980-10-11	2004-02-02
5	141	Production Technician - WC20	M	M	1968-10-11	2004-02-25