Министерство образования Республики Беларусь

Учреждение образования

БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

ИНФОРМАТИКИ И РАДИОЭЛЕКТРОНИКИ

Факультет компьютерных систем и сетей

Кафедра программного обеспечения информационных технологий

Дисциплина: Базы Данных (БД)

ОТЧЕТ

по лабораторной работе №4

Выполнил

студент: гр. 651006 Шепелевич

Проверил: Салей

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**Задачи**:

**№1**

**Подзадача 1.**

Запрос:

CREATE TABLE Sales.CurrencyHst (

ID INT IDENTITY(1, 1) PRIMARY KEY,

Action NVARCHAR(20) CHECK(Action IN ('INSERT', 'UPDATE', 'DELETE')),

ModifiedDate DATETIME NOT NULL,

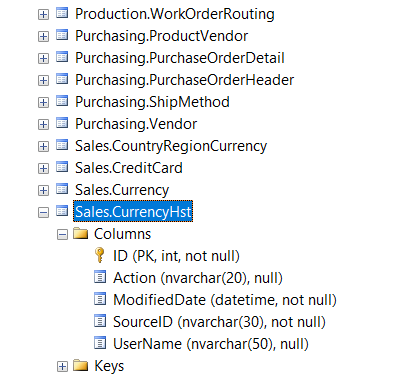
SourceID NVARCHAR(30) NOT NULL,

UserName NVARCHAR(50)

);

GO

Результат :



**Подзадача 2.**

Запрос:

CREATE TRIGGER currencyAfterInsert ON Sales.Currency

FOR INSERT

AS

DECLARE @sourceID NVARCHAR(30);

SELECT @sourceID = inserted.Name FROM inserted;

INSERT INTO Sales.CurrencyHst(Action, ModifiedDate, SourceID, UserName)

VALUES('INSERT', GETDATE(), @sourceID, CURRENT\_USER);

GO

CREATE TRIGGER currencyAfterUpdate ON Sales.Currency

FOR UPDATE

AS

DECLARE @sourceID NVARCHAR(30);

SELECT @sourceID = inserted.Name FROM inserted;

INSERT INTO Sales.CurrencyHst(Action, ModifiedDate, SourceID, UserName)

VALUES('UPDATE', GETDATE(), @sourceID, CURRENT\_USER);

GO

CREATE TRIGGER currencyAfterDelete ON Sales.Currency

FOR DELETE

AS

DECLARE @sourceID NVARCHAR(30);

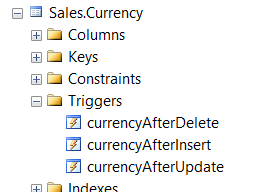
SELECT @sourceID = deleted.Name FROM deleted;

INSERT INTO Sales.CurrencyHst(Action, ModifiedDate, SourceID, UserName)

VALUES('DELETE', GETDATE(), @sourceID, CURRENT\_USER);

GO

Результат :



**Подзадача 3.**

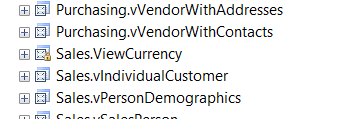
Запрос:

CREATE VIEW Sales.ViewCurrency

WITH ENCRYPTION

AS SELECT \* FROM Sales.Currency;

Результат :



**Подзадача 4.**

Запрос:

INSERT INTO Sales.Currency(CurrencyCode, ModifiedDate, Name)

VALUES('TST', GETDATE(), 'Hello!!!')

GO

UPDATE Sales.Currency

SET ModifiedDate= GETDATE(), Name= 'Hello!!!123'

WHERE CurrencyCode='TST'

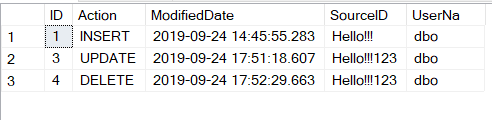
GO

DELETE FROM Sales.Currency

WHERE CurrencyCode='TST'

GO

Результат :



**№2**

**1)**

ALTER TABLE dbo.PersonPhone

ADD

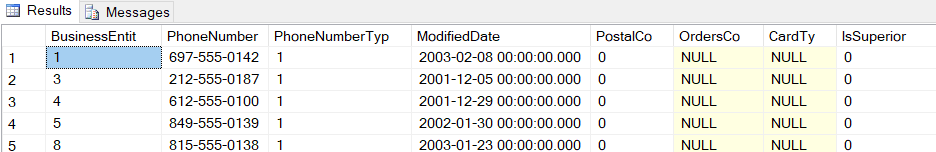
OrdersCount INT,

CardType NVARCHAR(50),

IsSuperior AS IIF (CardType = 'SuperiorCard', 1, 0);

GO

Результат :



**2)**

-- 2

CREATE TABLE #PersonPhone

(

BusinessEntityID INT NOT NULL PRIMARY KEY,

PhoneNumber NVARCHAR(25) NOT NULL,

PhoneNumberTypeID BIGINT NULL,

ModifiedDate DATETIME,

PostalCode NVARCHAR(15) DEFAULT ('0'),

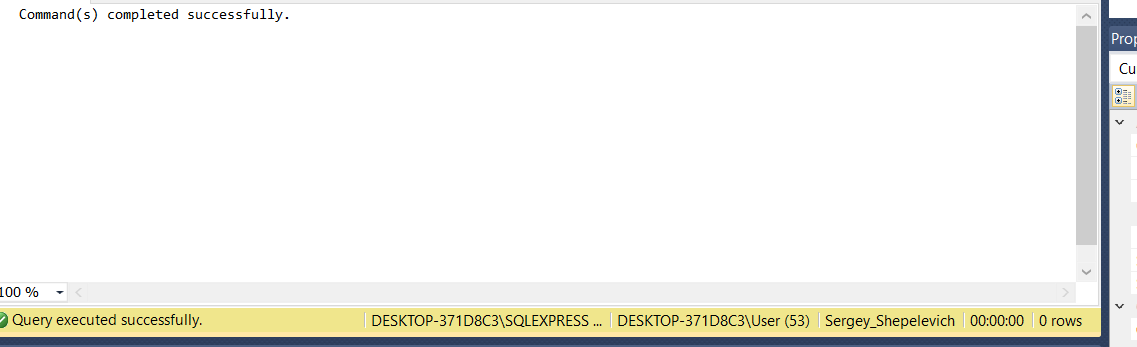
OrdersCount INT,

CardType NVARCHAR(50)

);

GO

Результат :



**3)**

--3

WITH Orders\_CTE (CreditCardID, OrdersCount)

AS

(

SELECT

CreditCardID,

COUNT(\*) AS OrdersCount

FROM

AdventureWorks2012.Sales.SalesOrderHeader

GROUP BY

CreditCardID

)

INSERT INTO #PersonPhone

(

BusinessEntityID,

PhoneNumber,

PhoneNumberTypeID,

ModifiedDate,

PostalCode,

OrdersCount,

CardType

)

SELECT

dbo.PersonPhone.BusinessEntityID,

dbo.PersonPhone.PhoneNumber,

dbo.PersonPhone.PhoneNumberTypeID,

dbo.PersonPhone.ModifiedDate,

dbo.PersonPhone.PostalCode,

Orders\_CTE.OrdersCount,

AdventureWorks2012.Sales.CreditCard.CardType

FROM dbo.PersonPhone

JOIN AdventureWorks2012.Sales.PersonCreditCard

ON (dbo.PersonPhone.BusinessEntityID = AdventureWorks2012.Sales.PersonCreditCard.BusinessEntityID)

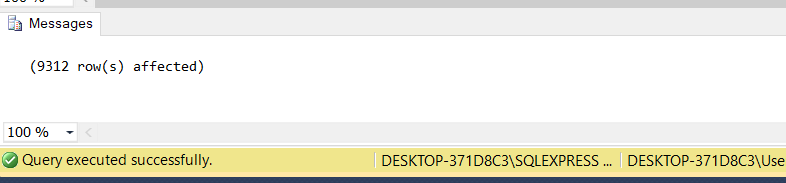
JOIN AdventureWorks2012.Sales.CreditCard

ON (AdventureWorks2012.Sales.PersonCreditCard.CreditCardID = CreditCard.CreditCardID)

JOIN Orders\_CTE

ON (CreditCard.CreditCardID = Orders\_CTE.CreditCardID);

Результат :



**4)**

DELETE

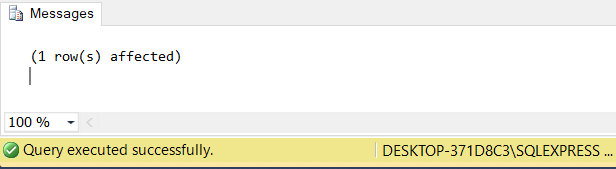
FROM

dbo.PersonPhone

WHERE

BusinessEntityID = 297;

Результат :



**5)**

-- 5

MERGE dbo.PersonPhone AS TARGET

USING #PersonPhone AS source

ON (TARGET.BusinessEntityID = source.BusinessEntityID)

WHEN MATCHED THEN

UPDATE

SET OrdersCount = source.OrdersCount, CardType = source.CardType

WHEN NOT MATCHED BY TARGET THEN

INSERT

(

BusinessEntityID,

PhoneNumber,

PhoneNumberTypeID,

ModifiedDate,

OrdersCount,

CardType

)

VALUES

(

BusinessEntityID,

PhoneNumber,

PhoneNumberTypeID,

ModifiedDate,

OrdersCount,

CardType

)

WHEN NOT MATCHED BY SOURCE THEN

DELETE;

GO

Результат :

