Create Database and Tables

for Database Servers

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November 2, 2014

At the start of the assignment I have created database in an according with instructions, but it was not possible to set the growth less than 500kb.

1 Tasks 1-3

Database files:

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth / Maxsize	Path	File Name
test_db	Rows ...	PRIMARY	5	By 10 percent, Unlimited	C:\temp	test_db_db.mdf
test_db_log	Log	Not Applicable	2	By 1 MB, Limited to 10 MB	C:\temp	test_db_log.ldf

Figure 1: The database creation

The $test\_db\_new\_log.ldf$ was added with the settings from task and the size of the test_db were increased.

Database files:

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth / Maxsize	Path	File Name
test_db	Rows ...	PRIMARY	10	By 10 percent, Unlimited	C:\temp	test_db_db.mdf
test_db_log	Log	Not Applica...	2	By 1 MB, Limited to 10 MB	C:\temp	test_db_log.ldf
test_db_ne...	Log	Not Applica...	2	By 2 MB, Limited to 209715...	C:\temp	test_db_new_log.ldf

Figure 2: Altering of the database

2 Task 4

The specification is required for columns:

- emp_no, emp_fname, emp_lname, (table employee)
- dept_no, dept_name, (table department)
- project_no, project_name, (project)
- emp_no, project_no. (works_no)

It is not required for all other columns.

```
USE sample;
CREATE TABLE employee   (emp_no INTEGER NOT NULL,
                         emp_fname CHAR(20) NOT NULL,
                         emp_lname CHAR(20) NOT NULL,
                         dept_no CHAR(4) NULL);
CREATE TABLE department(dept_no CHAR(4) NOT NULL,
                         dept_name CHAR(25) NOT NULL,
                         location CHAR(30) NULL);
CREATE TABLE project    (project_no CHAR(4) NOT NULL,
                         project_name CHAR(15) NOT NULL,
                         budget FLOAT NULL);
CREATE TABLE works_on   (emp_no INTEGER NOT NULL,
                         project_no CHAR(4) NOT NULL,
                         job CHAR (15) NULL,
                         enter date DATE NULL);
```

Figure 3: The code from 4th task

3 Tasks 5-11

I have declared the customers and orders tables

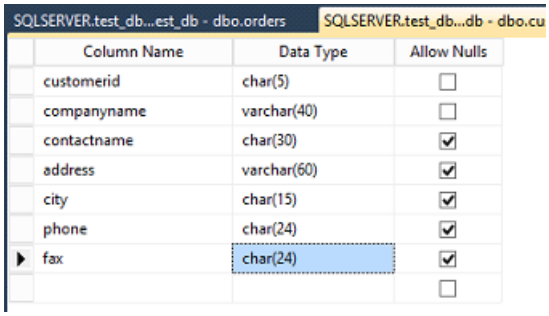

Figure 4: Customers table

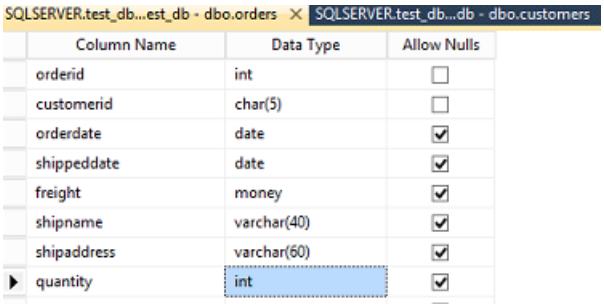

Figure 5: Orders table

And after that I altered the orders table in an according with requirements two times.

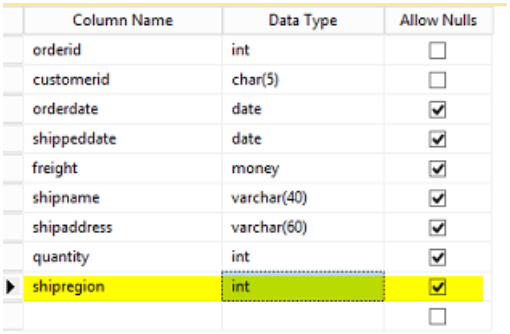

Figure 6: Alter orders table

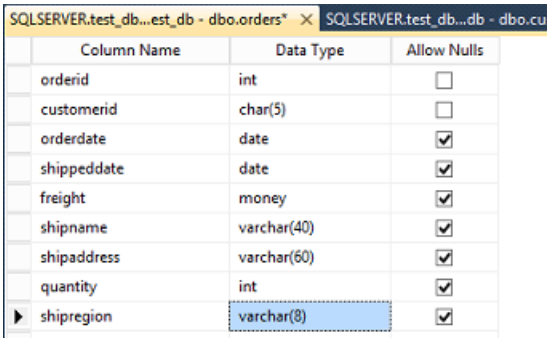

Figure 7: Alter orders table, again

At the next step I have deleted the spipregion column and re-create tables with Primary Keys.

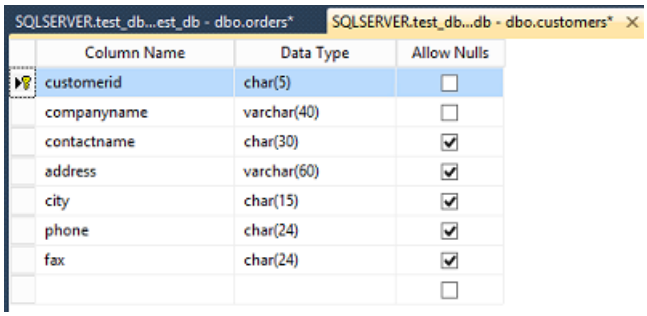

Figure 8: Re-create customers

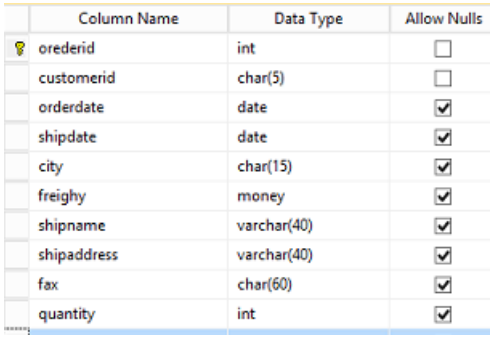

Figure 9: Re-create orders

After an execution of the DROP TABLE statement the the information about the table would be deleted from database and the machine's memory.

The insert query is not working because the custimerid is FK and we don't have the customer with such as an id in our customers table.

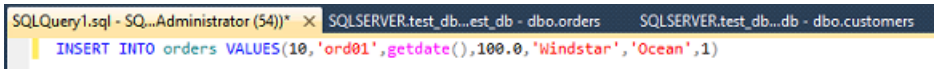

Figure 10: Insert new order

4 Task 12-15

The code bellow allows us set current date as an orderdate in orders.

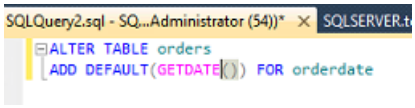

Figure 11: Default orderdate insert

The the source code on the picture 12 makes the value of quantity limited between 1 and 30.

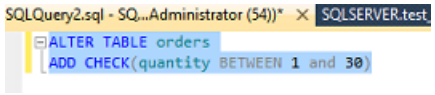

Figure 12: Default orderdate insert

At the next step I have made a query to show names of the columns with int type from orders table.

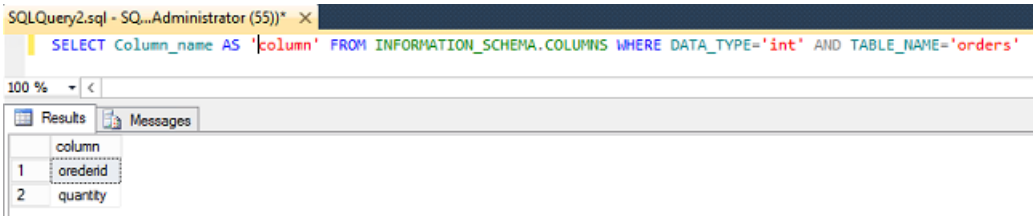

Figure 13: column names with int type, orders table

5 Task 15-17

It is not possible to delete primary key from customers table, because it makes the table an unreliable and it would also broke the reference between with orders, because it is FK for orders table, as result the database would be corrupted.

And finally I have renamed the column city into town on the customers table.

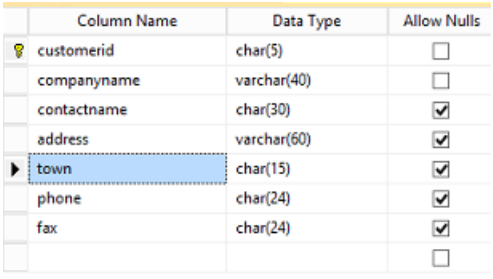

Figure 14: rename of city into town