

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS

TECHNICAL UNIVERSITY OF MOLDOVA

DATABASES AND KNOWLEDGE

LABORATORY WORK#5

Tables creation and update for T-SQL and PL/SQL

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Laboratory work #5

1 Purpose of the laboratory work

Introduction to update and creation of tables for T-SQL and PL/SQL.

2 Objectives

Elements of update and create of tables for T-SQL and PL SQL/language.

3 Laboratory work implementation

3.1 Tasks and Points

Basic knowledge of tables creation and update for T-SQL and PL/SQL.

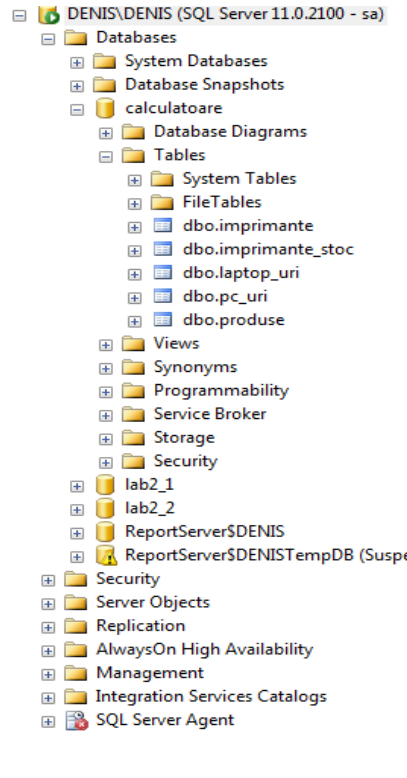
3.2 Laboratory work analysis

Specified tasks included steps like drop/creation of a database, creation/update of tables and creation of indices for given tables. All tasks were performed both, in MS SQL Server and Oracle. Git repository https://github.com/PosticaDenis/BDC_labs

3.3 Screens of my work

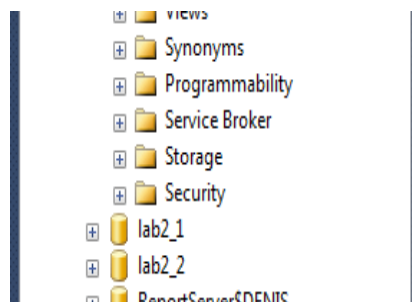
```
- DROP DATABASE calculatoare;
```

Figure 3.1 – Drop database "calculatoare".



```
CREATE DATABASE calculatoare;
GO;
use calculatoare;
CREATE TABLE imprimante
(Cod INT NOT NULL,
Model VARCHAR(4) NOT NULL,
Color CHAR(2) NOT NULL,
Tip VARCHAR(6) NOT NULL,
Pret FLOAT NOT NULL,
PRIMARY KEY(Cod));
GO;
CREATE TABLE laptop_uri
(Cod INT NOT NULL,
Model VARCHAR(4) NOT NULL,
Viteza DECIMAL(3,0) NOT NULL,
Ram DECIMAL(3,0) NOT NULL,
Hd DECIMAL(2,0) NOT NULL,
Pret FLOAT NOT NULL,
Ecran INT NOT NULL,
PRIMARY KEY(Cod));
GO;
CREATE TABLE pc_uri
(Cod INT NOT NULL,
Model VARCHAR(4) NOT NULL,
Viteza DECIMAL(3,0) NOT NULL,
Ram DECIMAL(3,0) NOT NULL,
Hd DECIMAL(2,0) NOT NULL,
Cd VARCHAR(3) NOT NULL,
Pret FLOAT NOT NULL,
PRIMARY KEY(Cod));
GO;
CREATE TABLE produse
(Prodicator CHAR NOT NULL,
Model VARCHAR(4) NOT NULL,
Tip VARCHAR(10) NOT NULL,
PRIMARY KEY(Prodicator));
```

Figure 3.2 – Create database "calculatoare" and all corresponding tables.



```
CREATE TABLE imprimante_stoc
(Cod INT NOT NULL,
Model VARCHAR(4) NOT NULL,
Color CHAR(2) NOT NULL,
Tip VARCHAR(6) NOT NULL,
Pret FLOAT NOT NULL,
PRIMARY KEY(Cod));
```

Figure 3.3 – Create database "imprimante_stoc".

```
- INSERT INTO imprimante_stoc
SELECT * FROM imprimante;
```

Figure 3.4 – Insert information from "imprimante" to "imprimante_stoc".

```
INSERT INTO produse(Prodicator, Model, Tip) VALUES ('Z', 4003, 'Imprimante'), ('Z', 4001, 'PC'), ('Z', 4002, 'Laptop_uri');
```

Figure 3.5 – Insert information into table "produse".

```

ALTER TABLE pc_uri ADD DEFAULT 32 FOR Ram;
ALTER TABLE pc_uri ADD DEFAULT 5 FOR Hd;
ALTER TABLE pc_uri ADD DEFAULT '12x' FOR Cd;
ALTER TABLE pc_uri ALTER COLUMN Viteza DECIMAL(4,0);

INSERT INTO pc_uri(Cod, Model, Viteza, Pret) VALUES (22, 4444, 1200, 1350);

```

Figure 3.6– Insert information into table "pc_uri".

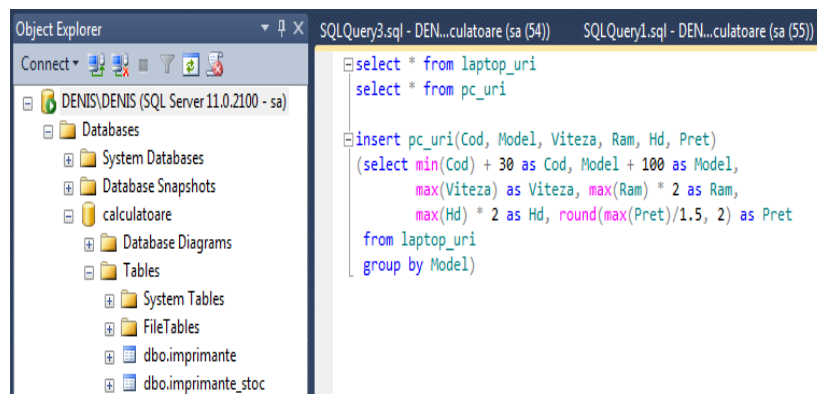


Figure 3.7– Insert more information into table "pc_uri".

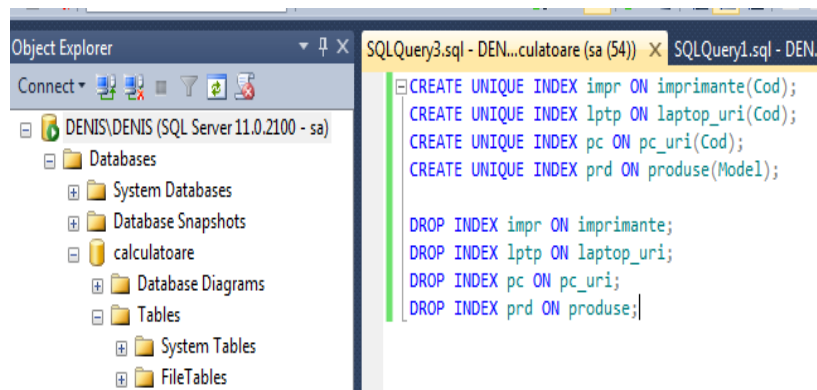


Figure 3.8– Create indices for all given tables.

Conclusions

While performing laboratory work #5 were gained basic skills of creating databases/tables, also update/alter of tables using Query editor for T-SQL and PL/SQL. The last but not the least, were performed first steps on creating indices fro tables. Were performed exercises of different levels of difficulty. Were obtained skills on editing databases/tables using Query editor.

References

- 1 Installing SQL Server 2012 Standard Edition, <http://www.exactsoftware.com/docs/DocView.aspx?DocumentID=%7B2e5c88a9-8611-4cb1-b229-92cac363e2fd%7D&NoHeader=1&NoSubject=1>
- 2 Oracle, *official page*, www.oracle.com