

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS
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DATABASES AND KNOWLEDGE

LABORATORY WORK#3

Creating and editing tables

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Laboratory work #2

1 Purpose of the laboratory work

Introduction to tables creation and edition.

2 Objectives

T-SQL and Oracle data types. Constraints. Creation, rename and update. table

3 Laboratory work implementation

3.1 Tasks and Points

Creation of tables. Updated of tables with required information.

3.2 Laboratory work analysis

Created database "calculatoare" with following tables: produse, pc_uri, laptop_uri and impri-mante. I made this both in Microsoft SQL Server and Oracle.

3.3 Screens of my work

1. Care din numerele prezentate mai jos pot fi introduse într-un câmp de tipul *DECIMAL(4,1)*?
- a) 16,2; **b) 116,2;** c) 16,21; d) 1116,2; e) 1116,21.

Figure 3.1 – Answer for 1st question

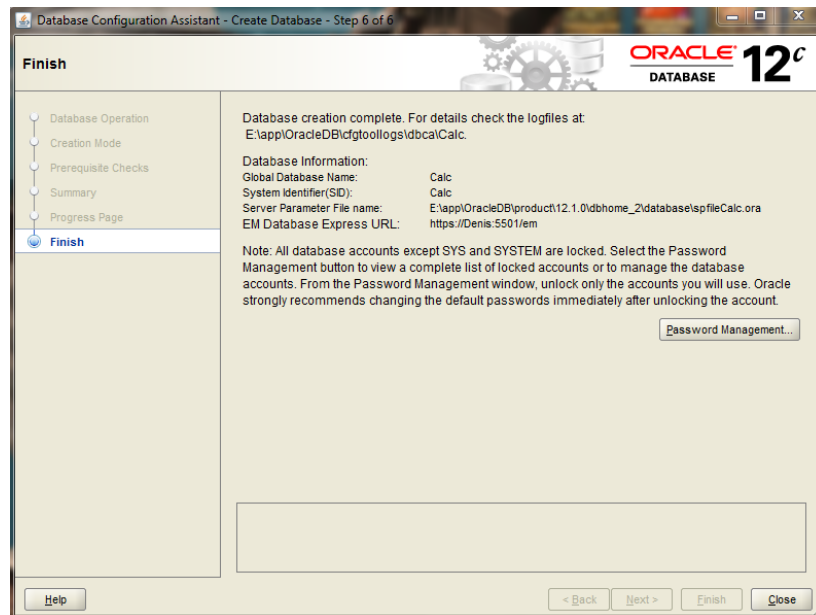


Figure 3.2 – Creation of DB "calculatoare" in Oracle

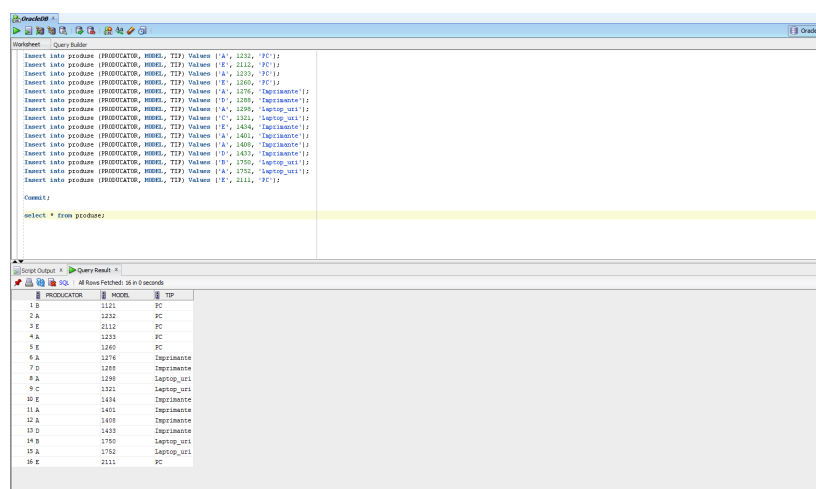


Figure 3.3 – Update of table "produse", Oracle

0.097 seconds

```

Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (1, 1232, 500, 64, 5, '12x', 600);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (2, 1121, 750, 128, 14, '40', 850);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (3, 1233, 500, 64, 5, '12x', 600);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (4, 1121, 600, 128, 14, '40x', 850);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (5, 1121, 600, 128, 8, '40x', 850);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (6, 1233, 750, 128, 20, '50x', 950);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (7, 1232, 500, 32, 10, '12x', 400);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (8, 1232, 450, 64, 8, '24x', 350);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (9, 1232, 450, 32, 10, '12x', 350);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (10, 1280, 500, 32, 10, '12x', 350);
Insert into pc_uri (COD, MODELO, VITEZA, RAM, HD, CD, PRET) Values (11, 1233, 900, 128, 40, '40x', 900);

Commit;

select * from pc_uri;

```

Script Output | Query Result | Query Result 1

All Rows Fetched: 11 in 0 seconds

	COD	MODELO	VITEZA	RAM	HD	CD	PRET
1	1 1232		500	64	5 12x		400
2	2 1121		750	128	14 40		850
3	3 1233		500	64	5 12x		600
4	4 1121		600	128	14 40x		850
5	5 1121		600	128	8 40x		850
6	6 1233		750	128	20 50x		950
7	7 1232		500	32	10 12x		400
8	8 1232		450	64	8 24x		350
9	9 1232		450	32	10 12x		350
10	10 1280		500	32	10 12x		350
11	11 1233		900	128	40 40x		900

Figure 3.4– Update of table ”pc_uri”, Oracle

0.141 seconds

```

Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (1, 1298, 350, 32, 4, 700, 11);
Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (2, 1321, 500, 64, 8, 970, 12);
Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (3, 2170, 750, 128, 12, 1200, 14);
Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (4, 1298, 600, 64, 10, 1050, 15);
Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (5, 1750, 750, 128, 10, 1150, 14);
Insert into laptop_uri (COD, MODELO, VITEZA, RAM, HD, PRET, ECRAN) Values (6, 1298, 450, 64, 10, 950, 12);

Commit;

select * from laptop_uri;

```

Script Output | Query Result 2 | Query Result 3

All Rows Fetched: 6 in 0 seconds

	COD	MODELO	VITEZA	RAM	HD	PRET	ECRAN
1	1 1298		350	32	4 700		11
2	2 1321		500	64	8 970		12
3	3 2170		750	128	12 1200		14
4	4 1298		750	128	10 1150		14
5	5 1750		600	64	10 1050		15
6	6 1298		450	64	10 950		12

Figure 3.5– Update of table ”laptop_uri”, Oracle

0.063 seconds

```

Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (1, 1276, 'nu', 'laser', 400);
Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (2, 1433, 'da', 'jet', 270);
Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (3, 1434, 'da', 'jet', 290);
Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (4, 1401, 'nu', 'Matrix', 150);
Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (5, 1408, 'nu', 'Matrix', 270);
Insert into imprimante (COD, MODELO, COLOR, TIP, PRET) Values (6, 1288, 'nu', 'laser', 400);

Commit;

select * from imprimante;

```

Script Output | Query Result 2 | Query Result 3 | Query Result 4

All Rows Fetched: 6 in 0 seconds

	COD	MODELO	COLOR	TIP	PRET
1	1 1276	nu		Laser	400
2	2 1433	da		Jet	270
3	3 1434	da		Jet	290
4	4 1401	nu		Matrix	150
5	5 1408	nu		Matrix	270
6	6 1288	nu		Laser	400

Figure 3.6– Update of table ”imprimante”, Oracle

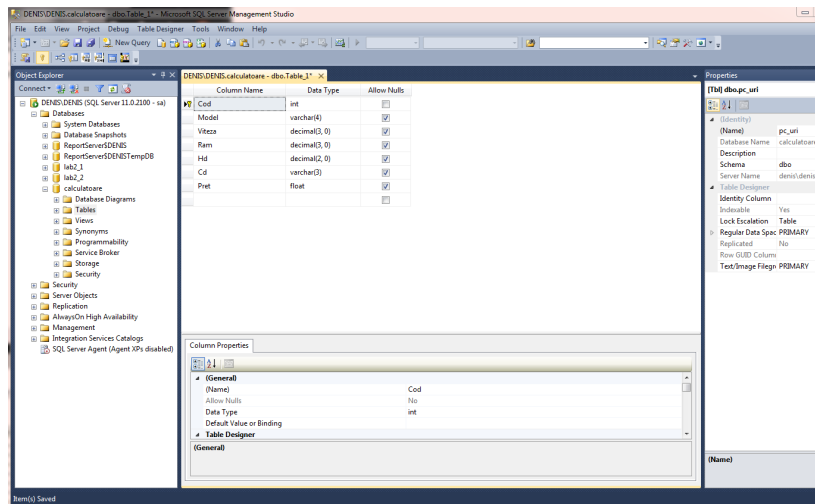


Figure 3.7– Creation of DB ”calculatoare” in MS SQL Server

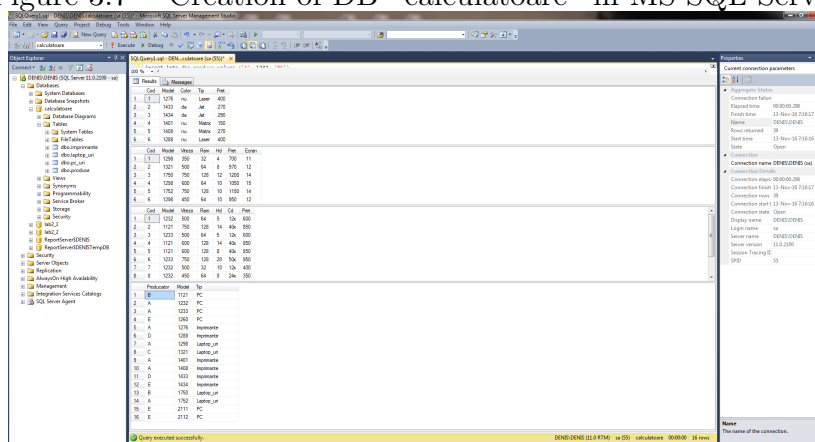


Figure 3.8– Creation of tables, MS SQL Server

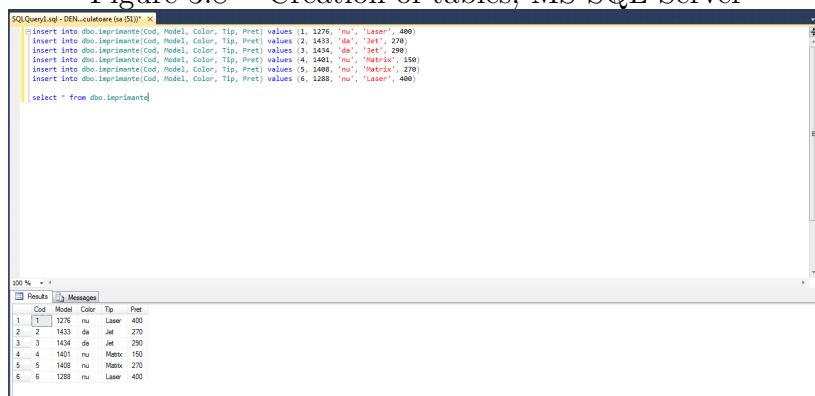


Figure 3.9– Update of table ”imprimante”, MS SQL Server

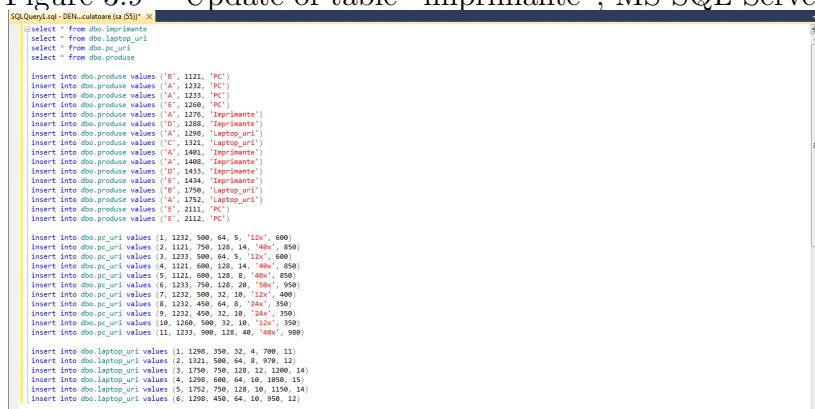


Figure 3.10– Update of tables ”produse”, ”pc_uri” and ”laptop_uri”, MS SQL Server

Conclusions

While performing laboratory work #3 were gained basic skills of management of tables in MS SQL Server and Oracle. The process of tables creation, both in MS SQL Server and Oracle, is simple, thus easy to create a new table. One of the particularities of Oracle is the necessity of using "Commit" statement.

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