Databases Laboratory Work Nr 2

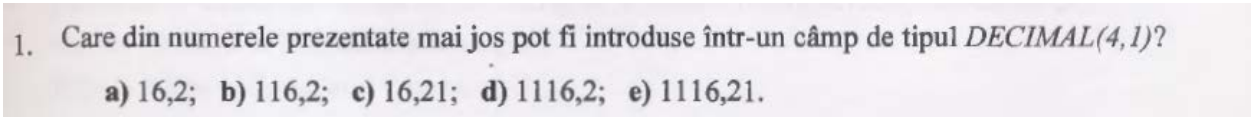
Title *Creating and modifying tables in SQL Server Management Studio*

Prerequisites: Reading of the chapter 3 from the book/

Objectives: Creating and modifying tables using the SQL Server Management Studio

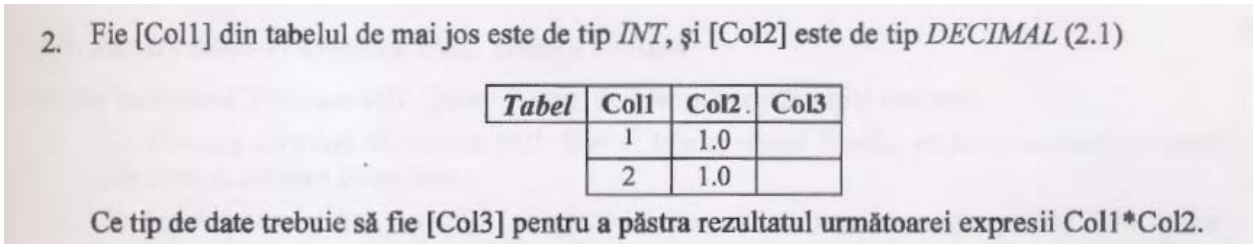
Tasks:

Implementation

1. 
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.

The response will be the numbers: 116.2 and 16.2.

The definition of the *DECIMAL(P, [S])* data type says that as parameters this data type can take P equal to the maximum number of digits and S the number of digits that are allow before point, so the DECIMAL(4,1) will accept a max of 4 digits with 1 digit max after point, this means that: 16.2 is allowed, 116.2 also is allowed, 16.21 is not allowed because it contains 2 digits after point, 1116.2 is also not allowed because it contains in total 5 digits and last 1116,21 is not allow because it contains in total 6 digits, also 2 digits after point.

2. 
2. Fie [Col1] din tabelul de mai jos este de tip *INT*, şi [Col2] este de tip *DECIMAL* (2.1)

Tabel	Col1	Col2	Col3
	1	1.0	
	2	1.0	

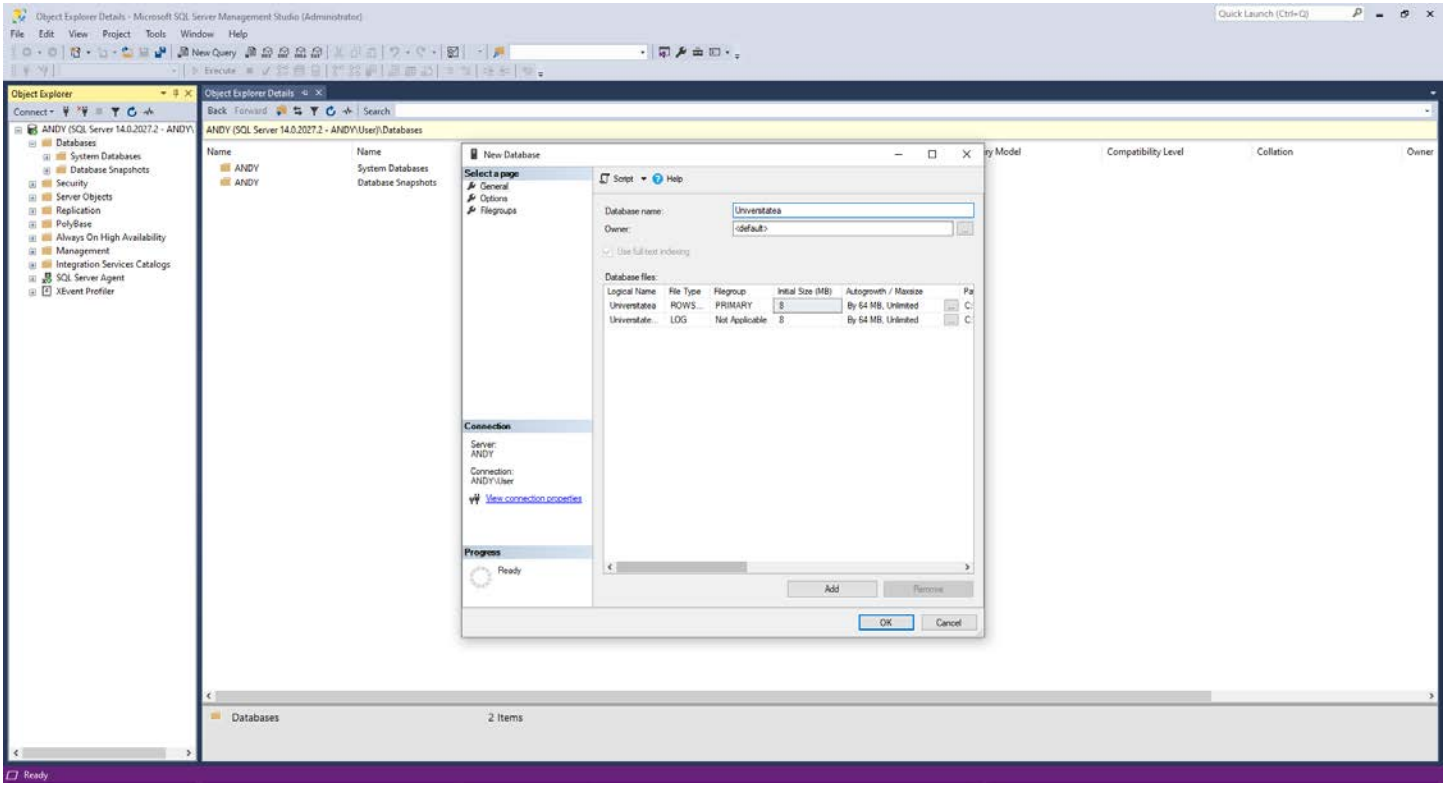
Ce tip de date trebuie să fie [Col3] pentru a păstra rezultatul următoarei expresii Col1*Col2.

The response is DECIMAL(2,1), because in SQL Server there is when two expressions have data types with different collations, accuracies, scales or lengths and are

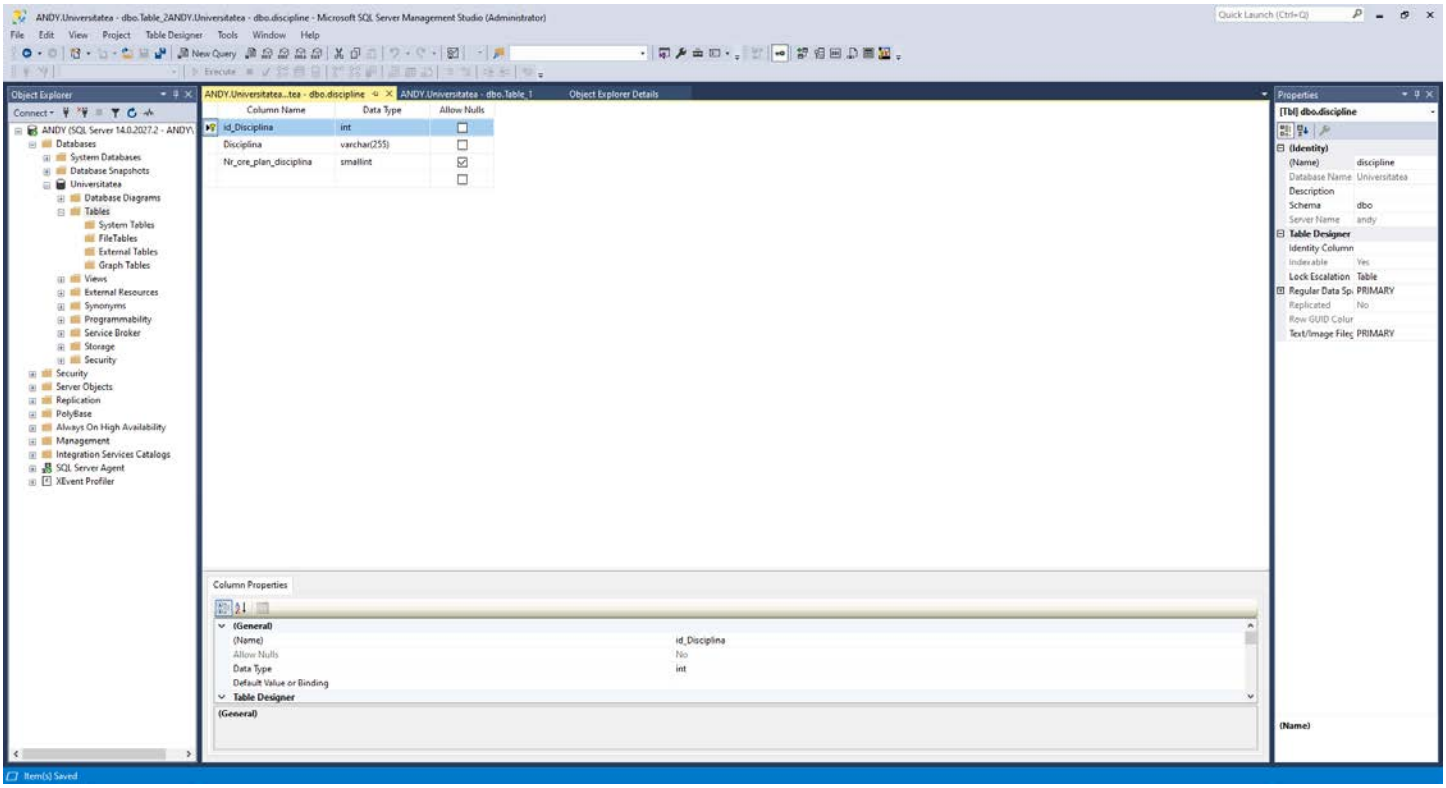
combined by an operator, the characteristics of the result are determined, by the precedence rules of the types of data from expressions. The data type DECIMAL is of higher order than INT, then the resulting data type is DECIMAL(2,1).

3.

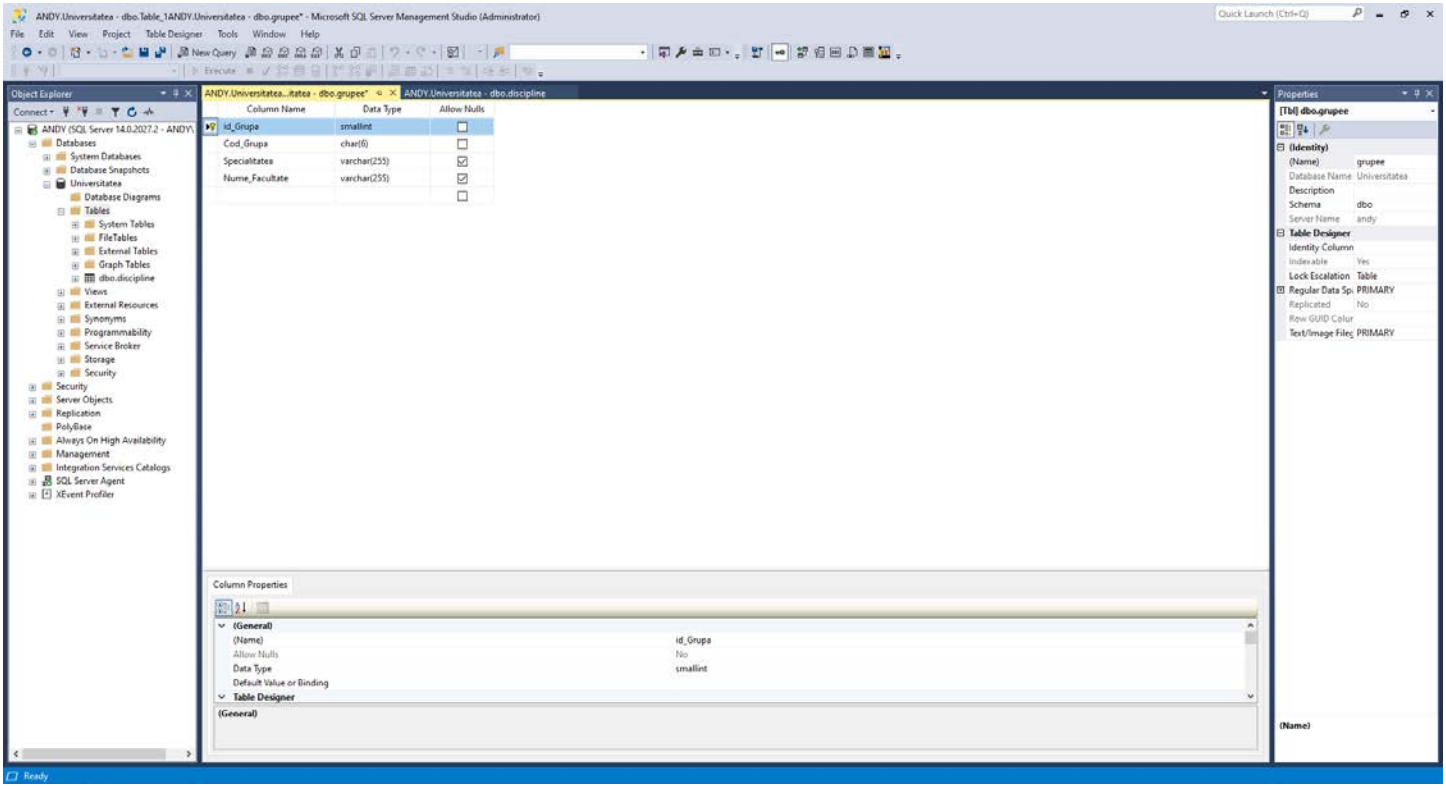
3. Creați o bază de date numită ***universitatea*** cu proprietăți implicite. În cadrul acestei baze de date, creați 2 tabele (***grupe***, ***discipline***), schemele cărora sunt definite în secțiunea 3.3 a capitolului.



Create a new data base “universitatea”



Create a new table “Discipline” with the 3 columns first id_Disciplina, Disciplina and Nr_ore_plan_disciplina with the primary key id_Disciplina.



Create a new table “Grupe” with the 4 columns: id_Grupa, Cod_Grupa, Specialitatea, Nume_Facultate with the primary key id_Grupa.

4. Inserați în tabelele respective ale bazei de date ***universitatea*** următoarele înregistrări:

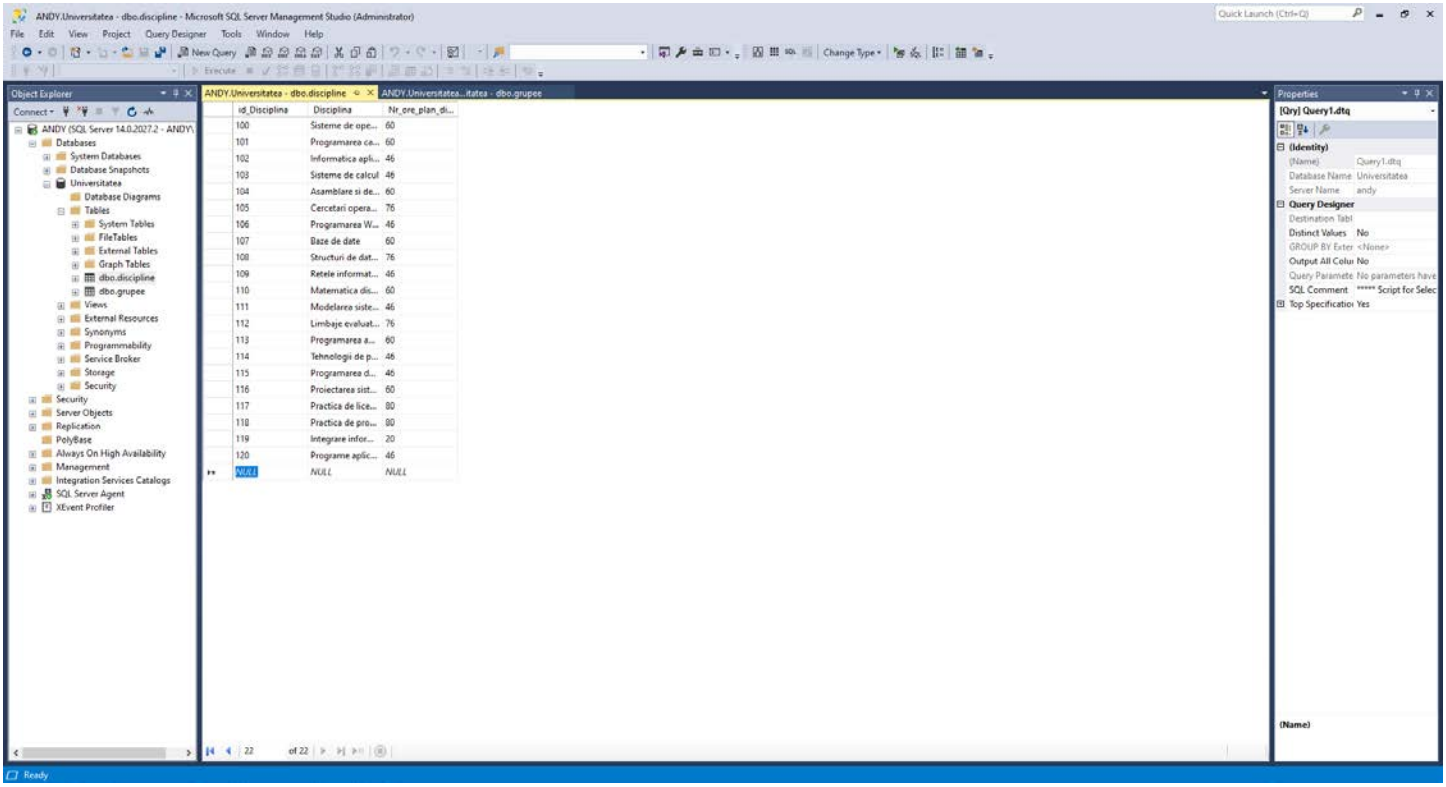
4.

discipline

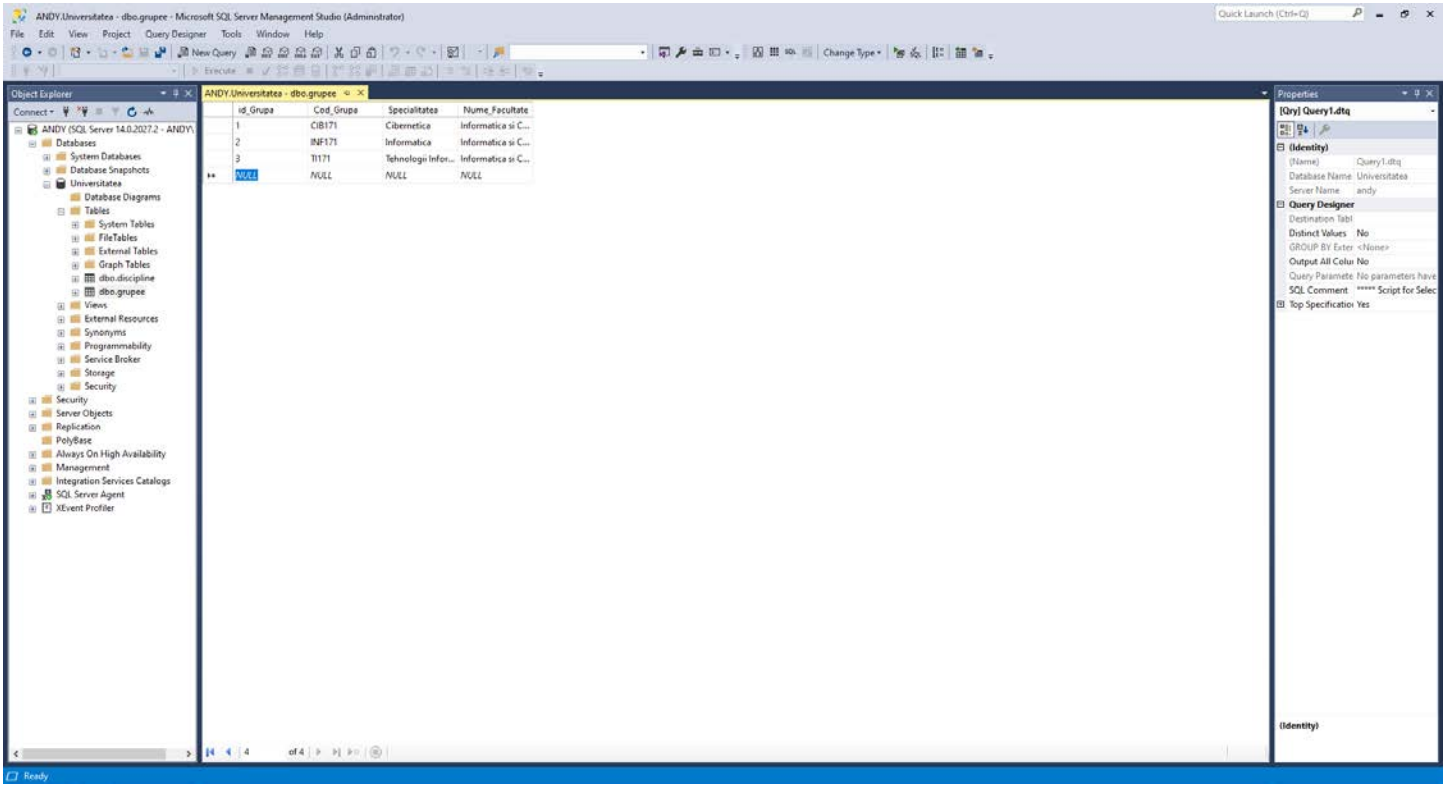
Id_Disciplina	Disciplina	Nr_ore_plan_disciplina
100	Sisteme de operare	60
101	Programarea calculatoarelor	60
102	Informatica aplicata	46
103	Sisteme de calcul	46
104	Asamblare si depanare PC	60
105	Cercetari operationale	76
106	Programarea WEB	46
107	Baze de date	60
108	Structuri de date si algoritmi	76
109	Retele informatice	46
110	Matematica discreta	60
111	Modelarea sistemelor	46
112	Limbaje evaluate de programare (Java,.NET)	76
113	Programarea aplicatiilor Windows	60
114	Tehnologii de procesare a informatiei	46
115	Programarea declarativa	46
116	Proiectarea sistemelor informatice	60
117	Practica de licenta	80
118	Practica de productie	80
119	Integrare informationala europeana	20
120	Programe aplicative	46

grupe

Id_Grupa	Cod_Grupa	Specialitate	Nume_Facultate
1	CIB171	Cibernetica	Informatica si Cibernetica
2	INF171	Informatica	Informatica si Cibernetica
3	TI171	Tehnologii Informationale	Informatica si Cibernetica



Inserting the given data in the created table “Discipline”.



Inserting the given data in the created table “grupe”.

Conclusion

In this laboratory work I familiarized myself with the SQL Server Management Studio tool for creating and maintaining databases in more details, also studying the necessary information I acquainted the necessary steps for creating a database to which were added some tables that store information. Was learned the process of creating and configuring tables, also there were studied the main data types that SQL Server provide for the configuration of column elements.