

SQL Table Creation, Relationships, and Data Insertion

"Universities" table

The screenshot shows the SQL Studio interface with the 'Universities' table being created and populated. The SQL editor contains the following code:

```
1 USE education;
2 CREATE TABLE Universities (
3     id int NOT NULL AUTO_INCREMENT PRIMARY KEY,
4     UniName varchar (20),
5     City varchar (20)
6 );
7 INSERT INTO education.Universities (id, UniName, City) VALUES
8 (1, "KNEU", "Kyiv"),
9 (2, "KMA", "Kyiv"),
10 (3, "LNU", "Lviv"),
11 (4, "KhAI", "Kharkiv"),
12 (5, "ONPU", "Odesa"),
13 (6, "DNU", "Dnipro"),
14 (7, "CHNU", "Chernivci"),
15 (8, "TNEU", "Ternopil");
```

The 'Result Grid' shows the data inserted into the 'Universities' table:

id	UniName	City
1	KNEU	Kyiv
2	KMA	Kyiv
3	LNU	Lviv
4	KhAI	Kharkiv
5	ONPU	Odesa
6	DNU	Dnipro
7	CHNU	Chernivci
8	TNEU	Ternopil

The 'Object Info' panel shows the table structure:

Table: **Universities**

Columns:

- id: int AI PK
- UniName: varchar(20)
- City: varchar(20)

The 'Action Output' panel shows the execution of the query:

Time	Action	Response	Duration / Fetch Time
00:22:14	SELECT * FROM Universities LIMIT 0, 1000	10 row(s) returned	0.030 sec / 0.00020...

"Faculties" table with Foreign key

The screenshot shows the SQL Studio interface with the 'Faculties' table being created and populated. The SQL editor contains the following code:

```
22 CREATE TABLE Faculties (
23     id int NOT NULL AUTO_INCREMENT PRIMARY KEY,
24     nameOfFaculties varchar (50),
25     UniversityID int,
26     FOREIGN KEY (UniversityID) REFERENCES Universities(id)
27 );
28
29 INSERT INTO education.Faculties (id, nameOfFaculties, UniversityID) VALUES
30 (1, "Faculty of Social Sciences", 10),
31 (2, "Faculty of Foreign Languages", 2),
32 (3, "Faculty of Computer Science", 8),
33 (4, "Faculty of Philology", 3),
34 (5, "Faculty of Economics and Management", 1),
35 (6, "Faculty of Marketing", 1),
36 (7, "Faculty of Accounting and Auditing", 9),
37 (8, "Faculty of Law", 6),
38 (9, "Faculty of Medicine", 4),
39 (10, "Faculty of Engineering", 5),
40 (11, "Faculty of Agriculture", 7),
41 (12, "Faculty of Business Administration", 1);
```

The 'Result Grid' shows the data inserted into the 'Faculties' table:

id	nameOfFaculties	UniversityID
1	Faculty of Social Sciences	10
2	Faculty of Foreign Languages	2
3	Faculty of Computer Science	8
4	Faculty of Philology	3
5	Faculty of Economics and Management	1
6	Faculty of Marketing	1
7	Faculty of Accounting and Auditing	9
8	Faculty of Law	6
9	Faculty of Medicine	4
10	Faculty of Engineering	5
11	Faculty of Agriculture	7
12	Faculty of Business Administration	1

The 'Object Info' panel shows the table structure:

Table: **Faculties**

Columns:

- id: int AI PK
- nameOfFaculties: varchar(50)
- UniversityID: int

The 'Action Output' panel shows the execution of the query:

Time	Action	Response	Duration / Fetch Time
00:23:23	SELECT * FROM Faculties LIMIT 0, 1000	12 row(s) returned	0.014 sec / 0.000010...

”StudentGroups” table with Foreign key

Administration

Schemas

28 task save*

SQL File 3*

SQL File 5*

Context... Snippets

SCHEMAS

Filter objects

db1

db2

education

Tables

Faculties

StudentGroups

Students

Universities

Views

Stored Procedures

Functions

HotelsDB

sys

44

45 CREATE TABLE education.StudentGroups (
46 id int NOT NULL AUTO_INCREMENT PRIMARY KEY,
47 GroupNumber int,
48 FacultyID int, FOREIGN KEY (FacultyID) REFERENCES Faculties(id)
49);
50
51 SELECT * FROM education.StudentGroups;
52
53 INSERT INTO education.StudentGroups (id, GroupNumber, FacultyID) VALUES
54 (1, 101, 4),
55 (2, 302, 2),
56 (3, 104, 8),
57 (4, 202, 1),
58 (5, 401, 5),
59 (6, 505, 7),
60 (7, 305, 3);

100% 39:51

Result Grid

Filter Rows: Search

Edit: Export/Import:

Result Grid

Form Editor

Object Info

Session

Table: StudentGroups

Columns:

id int AI PK

GroupNumber int

FacultyID int

StudentGroups 15

Apply

Revert

Action Output

Time

Action

Response

Duration / Fetch Time

85 00:26:34 SELECT * FROM education.StudentGroups LIMIT 0, 1000 7 row(s) returned 0.00091 sec / 0.0000...

Query Completed

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

”Students” table with Foreign key

AdministrationSchemas28 task save*SQL File 3*SQL File 5*Context...Snippets

SCHEMASFilter objectsdb1db2educationTablesFacultiesStudentGroupsStudentsUniversitiesViewsStored ProceduresFunctionsHotelsDBsys

Object InfoSessionTable: StudentsColumns: id int AI PKnameOfStudent varchar(20)surname varchar(20)age intGroupID int

62CREATE TABLE Students (
63 id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
64 nameOfStudent VARCHAR(20),
65 surname VARCHAR(20),
66 age INT,
67 GroupID INT,
68 FOREIGN KEY (GroupID) REFERENCES education.StudentGroups(id)
69);
70
71 INSERT INTO education.Students (nameOfStudent, surname, age, GroupID) VALUES
72 ("Natalia", "Stepanenko", 20, 4),
73 ("Rina", "Venglovska", 19, 2),
74 ("David", "Felix", 18, 1),
75 ("Petro", "Shevchenko", 19, 7),
76 ("John", "Smith", 23, 6),
77 ("Helen", "Stepanenko", 20, 5),
78 ("Maria", "Shevchuk", 21, 1),
79 ("Ivan", "Baraban", 22, 4),
80 ("Nell", "Grace", 21, 2),
81 ("Emma", "Franko", 18, 3),
82 ("Bohdan", "Plotko", 21, 7),
83 ("Natalia", "Popeliuha", 20, 5),
84 ("Tamara", "Danova", 22, 6),
85 ("Diana", "Kotenko", 19,3);
86

100%1:88

Action OutputTimeActionResponseDuration / Fetch Time
8600:27:34SELECT * FROM education.Students LIMIT 0, 100014 row(s) returned0.00098 sec / 0.000...

Query Completed

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

AdministrationSchemas28 task save*SQL File 3*SQL File 5*Context...Snippets

SCHEMASFilter objectsdb1db2educationTablesFacultiesStudentGroupsStudentsUniversitiesViewsStored ProceduresFunctionsHotelsDBsys

Object InfoSessionTable: StudentsColumns: id int AI PKnameOfStudent varchar(20)surname varchar(20)age intGroupID int

80("Nell", "Grace", 21, 2),
81("Emma", "Franko", 18, 3),
82("Bohdan", "Plotko", 21, 7),
83("Natalia", "Popeliuha", 20, 5),
84("Tamara", "Danova", 22, 6),
85("Diana", "Kotenko", 19,3);
86
87SELECT * FROM education.Students;
100%34:87

Result GridFilter Rows: SearchEditExport/Import
idnameOfStudentsurnameageGroupID
1NataliaStepanenko204
2RinaVenglovska192
3DavidFelix181
4PetroShevchenko197
5JohnSmith236
6HelenStepanenko205
7MariaShevchuk211
8IvanBaraban224
9NellGrace212
10EmmaFranko183
11BohdanPlotko217
12NataliaPopeliuha205
13TamaraDanova226
14DianaKotenko193
NULLNULLNULLNULLNULL
Students 17ApplyRevert

Action OutputTimeActionResponseDuration / Fetch Time
8700:31:34SELECT * FROM education.Students LIMIT 0, 100014 row(s) returned0.00067 sec / 0.000...

Query Completed

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.