

BSP 4.1_2

Задание 1:

The screenshot displays a database management interface. The top pane, titled '1_CREATE', shows the SQL command to create a table named 'Элемент' (Element) with two columns: 'ElemID' (integer, primary key, auto-increment) and 'ElemName' (varchar(50), not null). The bottom pane shows the same interface with a query 'SELECT * FROM NewDatabase.Элемент;' executed. The 'Navigator' on the left shows the database structure, including 'NewDatabase' and its tables. The 'Result Grid' at the bottom shows a single row with 'NULL' values for both columns.

```
1 CREATE TABLE Элемент (  
2     ElemID INT PRIMARY KEY AUTO_INCREMENT,  
3     ElemName VARCHAR(50) NOT NULL  
4 );  
5
```

Navigator:

SCHEMAS

Filter objects

- firstModel
- mydb
- NewDatabase
 - Tables
 - Элемент
 - Views
 - Stored Procedures
 - Functions
- SHEEEEMA
- simplifiedb
- SR4
- sys

1_CREATE Элемент

1 SELECT * FROM NewDatabase.Элемент;

Result Grid

	ElemID	ElemName
*	NULL	NULL

Задание 2:

```
2_CREATE Элемент1 x
[Icons] | Limit to 1000 rows
1 • CREATE TABLE Элемент1 (
2     ElemID1 INT,
3     ElemID2 INT,
4     ElemName VARCHAR(50) NOT NULL,
5     PRIMARY KEY (ElemID1, ElemID2)
6 );
7
```

```
2_CREATE Элемент1 | Элемент1 x
[Icons] | Limit to
1 • SELECT * FROM NewDatabase.Элемент1;
```

Result Grid	[Grid Icon]	[Refresh Icon]	Filter Rows:	[Input Field]	Edit:	[Edit Icon]
	ElemID1	ElemID2	ElemName			
*	NULL	NULL	NULL			

Этот запрос создаст таблицу "Элемент1" с тремя столбцами: ElemID1, ElemID2 и ElemName. Первичным ключом будет комбинация столбцов ElemID1 и ElemID2.

Задание 3:

3_CREATE Элементы

```
1 CREATE TABLE Элементы (  
2     ElementsID INT PRIMARY KEY AUTO_INCREMENT,  
3     ElemID INT NOT NULL,  
4     Comment TEXT,  
5     FOREIGN KEY (ElemID) REFERENCES Элемент(ElemID)  
6 );  
7
```

3_CREATE Элементы Элементы

```
1 SELECT * FROM NewDatabase.Элементы;
```

Result Grid Filter Rows: Edit:

	ElementsID	ElemID	Comment
*	NULL	NULL	NULL

Задание 4:

4_CREATE Элементы x Элементы

Limit to 1000 rows

```
1 CREATE TABLE Элементы (  
2     ElementsID INT PRIMARY KEY AUTO_INCREMENT,  
3     ElemID INT NOT NULL,  
4     Comment TEXT,  
5     CONSTRAINT fk1 FOREIGN KEY (ElemID) REFERENCES Элемент(ElemID)  
6 );  
7
```

4_CREATE Элементы Элементы x

Limit

```
1 SELECT * FROM NewDatabase.Элементы;
```

Result Grid

Filter Rows: Edit:

	ElementsID	ElemID	Comment
•	NULL	NULL	NULL

Задание 5:

```
5_CREATE Book x 6_CREATE BookStatus 7_CREATE BookInLib
Limit to 1000 rows
1 CREATE TABLE Book (
2     BookID INT PRIMARY KEY AUTO_INCREMENT,
3     Title VARCHAR(255) NOT NULL,
4     AuthorID INT NOT NULL,
5     Genre VARCHAR(100),
6     UNIQUE (Title),
7     FOREIGN KEY (AuthorID) REFERENCES Author(AuthorID)
8 );
9
```

```
5_CREATE Book 6_CREATE BookStatus x 7_CREATE BookInLib
Limit to 1000 rows
1 CREATE TABLE BookStatus (
2     StatusID INT PRIMARY KEY AUTO_INCREMENT,
3     StatusName VARCHAR(50) NOT NULL UNIQUE
4 );
5
```

```
5_CREATE Book 6_CREATE BookStatus 7_CREATE BookInLib x
Limit to 1000 rows
1 CREATE TABLE BookInLib (
2     LibraryID INT,
3     BookID INT,
4     StatusID INT,
5     CONSTRAINT pk_LibraryBook PRIMARY KEY (LibraryID, BookID),
6     FOREIGN KEY (LibraryID) REFERENCES Library(LibraryID),
7     FOREIGN KEY (BookID) REFERENCES Book(BookID),
8     FOREIGN KEY (StatusID) REFERENCES BookStatus(StatusID)
9 );
10
```

5_CREATE Book 6_CREATE BookStatus 7_CREATE BookInLib **Book** BookStatus BookInLib

Limit to 1000 rows

```
1 • SELECT * FROM NewDatabase.Book;
```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	BookID	Title	AuthorID	Genre
*	NULL	NULL	NULL	NULL

5_CREATE Book 6_CREATE BookStatus 7_CREATE BookInLib Book **BookStatus** BookInLib

Limit to 1000 rows

```
1 • SELECT * FROM NewDatabase.BookStatus;
```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	StatusID	StatusName
*	NULL	NULL

5_CREATE Book 6_CREATE BookStatus 7_CREATE BookInLib Book BookStatus BookInLib x

Limit to 1000 rows

```
1 • SELECT * FROM NewDatabase.BookInLib;
```

Result Grid

	LibraryID	BookID	StatusID
*	NULL	NULL	NULL

Задание 6:

8_ALTER и 9_add constr 10_drop constr

```
1 • ALTER TABLE Элемент1
2 ADD COLUMN info VARCHAR(200);
3
```

8_ALTER и 9_add constr 10_drop constr x

```
1 • ALTER TABLE Элемент1
2 ADD CONSTRAINT un_info UNIQUE(info);
3
```

8_ALTER и 9_add constr 10_drop constr **Элемент1** ×

Limit to 1000 rows

```
1 • SELECT * FROM NewDatabase.Элемент1;
```

Result Grid

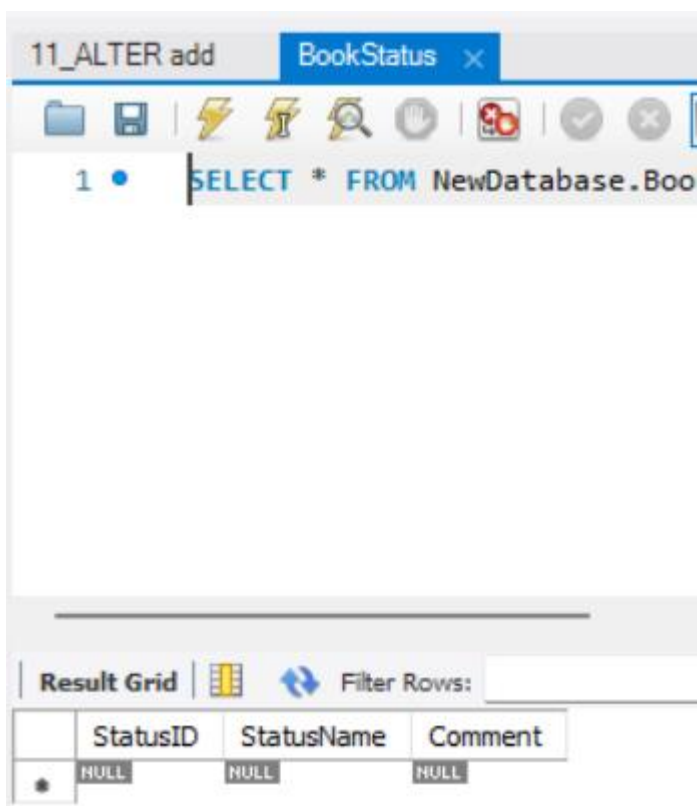
	ElemID1	ElemID2	ElemName	info
•	NULL	NULL	NULL	NULL

Задание 7:

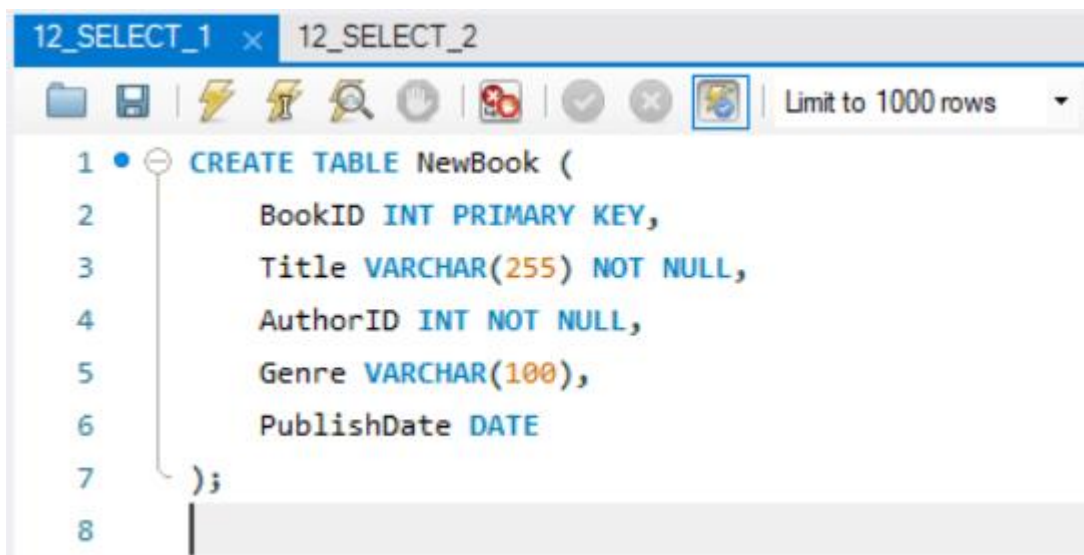
11_ALTER add ×

Limit to 1000 rows

```
1 • ALTER TABLE BookStatus
2   ADD COLUMN Comment VARCHAR(200) NOT NULL;
3
```

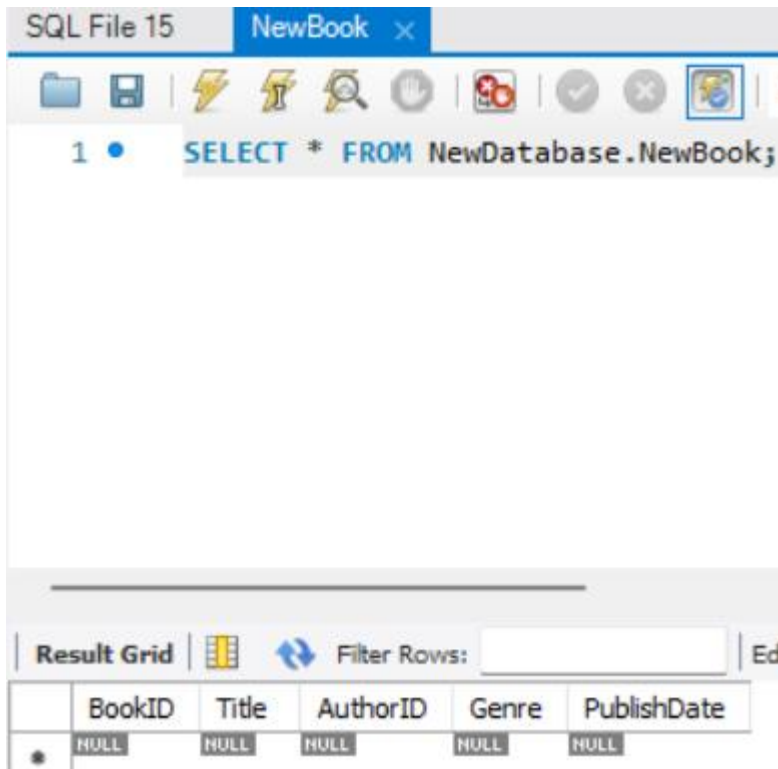



Задание 8:





```
1 • INSERT INTO NewBook (BookID, Title, AuthorID, Genre, PublishDate)
2   SELECT BookID, Title, AuthorID, Genre, PublishDate
3   FROM Book
4   WHERE YEAR(PublishDate) > 2000;
5
```



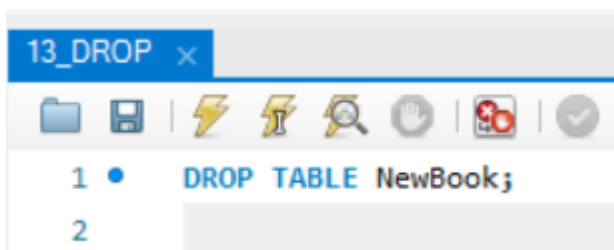
```
1 • SELECT * FROM NewDatabase.NewBook;
```

Result Grid

	BookID	Title	AuthorID	Genre	PublishDate
•	NULL	NULL	NULL	NULL	NULL

В SQL Workbench нет поддержки конструкции SELECT ... INTO ... для создания новой таблицы на основе выборки из существующей таблицы, как в некоторых других СУБД. Вместо этого, вы можете вручную создать новую таблицу "NewBook" с нужной структурой и затем вставить в неё данные из таблицы "Book"

Задание 9:



```
1 • DROP TABLE NewBook;
2
```

Задание 10:

