

# DATABASE MANAGEMENT SYSTEM

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# Examples

# Ex-1

A

The screenshot shows a database management interface with the following details:

- Title Bar:** Local instance 3306
- Toolbar:** Includes icons for Home, Database, Schemas, Tables, Views, Procedures, Functions, Triggers, and Help.
- Navigation:** Administration tab selected, Schemas tab, Section-2 tab.
- Search:** Filter objects search bar.
- Object List:** SCHEMAS section shows databases "databasename" and "sys".
- Query Editor:** Section-2 tab contains the query: `CREATE DATABASE databasename;`
- Help Message:** A tooltip on the right states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."
- Performance Metrics:** 100% completion, 30:1 ratio.
- Action Output:** Table showing the execution of the query:

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE databasename	12:52:28	1 row(s) affected	0.0016 sec
- Status:** Query Completed.

# Ex-1

## B

The screenshot shows a dark-themed interface of a database management tool. At the top, there's a navigation bar with icons for Home, Local instance 3306, and other system functions. Below the navigation bar is a toolbar with various icons for file operations, search, and database management.

The main area is divided into sections: Administration, Schemas, and Section-2. The Schemas section shows two entries: 'databasename' and 'sys'. A search bar labeled 'Filter objects' is present in this section.

In the Section-2 area, there's a code editor with the following SQL command:

```
1 CREATE DATABASE IF NOT EXISTS databasename;
```

To the right of the code editor, a message states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

At the bottom of the interface, there's a status bar showing "100% 30:1" and a table titled "Action Output". The table has columns for Time, Action, Response, and Duration / Fetch Time. It contains one row of data:

	Time	Action	Response	Duration / Fetch Time
1	12:52:28	CREATE DATABASE databasename	1 row(s) affected	0.0016 sec

At the very bottom of the screen, a footer message reads: "SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'".

# Ex-2

A

The screenshot shows a dark-themed interface of a database management tool. At the top, there's a navigation bar with icons for Home, Local instance 3306, Administration, Schemas, Section-2, Context Help, and Snippets. Below the navigation bar is a toolbar with various icons for file operations, search, and database management.

The main area is divided into sections. On the left, there's a 'SCHEMAS' browser with a tree view showing a single node 'sys'. A search bar labeled 'Filter objects' is positioned above the tree. In the center, a code editor window titled 'Section-2' contains the following SQL command:

```
1  DROP DATABASE databasename;
```

To the right of the code editor, a message box displays the following text:

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

At the bottom of the interface, there's a 'Action Output' section with a table showing the results of the executed commands:

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE databasename	12:52:28	1 row(s) affected	0.0016 sec
DROP DATABASE databasename	12:54:08	0 row(s) affected	0.0025 sec

At the very bottom of the interface, a status bar indicates: 'SQL script saved to /Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-2

B

The screenshot shows a database management application window titled "Local instance 3306". The main area displays a SQL editor with the following content:

```
1  DROP DATABASE IF EXISTS databasename;
```

The application interface includes a toolbar at the top with various icons for database management tasks. On the left, there is a sidebar titled "SCHEMAS" showing a tree structure with a single node "sys". The bottom right corner of the interface has a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." Below the editor, there is a "Action Output" section with a table showing the results of the executed commands:

	Time	Action	Response	Duration / Fetch Time
✓ 1	12:52:28	CREATE DATABASE databasename	1 row(s) affected	0.0016 sec
✓ 2	12:54:08	DROP DATABASE databasename	0 row(s) affected	0.0025 sec

At the bottom of the interface, a status bar indicates "SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'".

# Ex-3

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

- Tables
  - Persons
    - Columns
    - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions
- sys

```
1 CREATE DATABASE IF NOT EXISTS databasename;
2 USE databasename;
3 CREATE TABLE Persons (
4     PersonId INT,
5     LastName VARBINARY(255),
6     FirstName VARBINARY(255),
7     Address VARBINARY(255),
8     City VARBINARY(255)
9 );
```

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

100% 3:9

Action Output

Time	Action	Response	Duration / Fetch Time
12:52:28	CREATE DATABASE databasename	1 row(s) affected	0.0016 sec
12:54:08	DROP DATABASE databasename	0 row(s) affected	0.0025 sec
12:57:52	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected	0.0023 sec
12:57:52	USE databasename	0 row(s) affected	0.00051 sec
12:57:52	CREATE TABLE Persons ( PersonId INT, LastName VARBINARY(255), FirstName VARBINARY(255), Address VARBINARY(255), City VARBINARY(255) );	0 row(s) affected	0.0072 sec

Query Completed

# Ex-4

A

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename Tables Views Stored Procedures Functions

sys

1 CREATE DATABASE IF NOT EXISTS databasename;  
2 USE databasename;  
3 DROP TABLE Persons;

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

100% 18:2

Action Output

	Time	Action	Response	Duration / Fetch Time
6	13:04:40	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00060 sec
7	13:04:40	USE databasename	0 row(s) affected	0.00016 sec
8	13:04:40	CREATE TABLE Persons ( PersonId INT, LastName VARBINARY(255), First...	Error Code: 1050. Table 'persons' already exists	0.0015 sec
9	13:04:55	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
10	13:04:55	USE databasename	0 row(s) affected	0.00013 sec
11	13:04:55	DROP TABLE Persons	0 row(s) affected	0.00041 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-4

## B

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename Tables Views Stored Procedures Functions

sys

1 CREATE DATABASE IF NOT EXISTS databasename;  
2 • USE databasename;  
3 • DROP TABLE IF EXISTS Persons;

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

100% 21:3

Action Output

Time	Action	Response	Duration / Fetch Time
9 13:04:55	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
10 13:04:55	USE databasename	0 row(s) affected	0.00013 sec
11 13:04:55	DROP TABLE Persons	0 row(s) affected	0.0041 sec
12 13:05:20	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00048 sec
13 13:05:20	USE databasename	0 row(s) affected	0.00017 sec
14 13:05:20	DROP TABLE IF EXISTS Persons	0 row(s) affected, 1 warning(s): 1051 Unknown table '...	0.0010 sec

Query Completed

# Ex-5

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

- Tables
  - Persons
    - Columns
      - PersonId
      - LastName
      - FirstName
      - Address
      - City
      - DateOfBirth
    - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE Persons (  
 PersonId INT,  
 LastName VARBINARY(255),  
 FirstName VARBINARY (255),  
 Address VARBINARY(255),  
 City VARBINARY(255)  
);  
ALTER TABLE Persons  
ADD DateOfBirth DATE;

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

100% 22:11

Action Output

	Time	Action	Response	Duration / Fetch Time
13	13:05:20	USE databasename	0 row(s) affected	0.00017 sec
14	13:05:20	DROP TABLE IF EXISTS Persons	0 row(s) affected, 1 warning(s): 1051 Unknown table '...	0.0010 sec
15	13:08:36	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00073 sec
16	13:08:36	USE databasename	0 row(s) affected	0.00015 sec
17	13:08:36	CREATE TABLE Persons ( PersonId INT, LastName VARBINARY(255), FirstName VARBINARY (255), Address VARBINARY(255), City VARBINARY(255) );	0 row(s) affected	0.0069 sec
18	13:08:36	ALTER TABLE Persons ADD DateOfBirth DATE	0 row(s) affected Records: 0 Duplicates: 0 Warning...	0.0082 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-6

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

Tables

Persons

Columns

PersonId  
LastName  
FirstName  
Address  
City  
DateOfBirth

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE Persons (  
    PersonId INT,  
    LastName VARBINARY(255),  
    FirstName VARBINARY (255),  
    Address VARBINARY(255),  
    City VARBINARY(255)  
);  
ALTER TABLE Persons  
ADD DateOfBirth DATE;  
ALTER TABLE Persons  
MODIFY COLUMN DateOfBirth YEAR;

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

100% 31:13

Action Output

Time	Action	Response	Duration / Fetch Time
13:08:36	USE databasename	0 row(s) affected	0.00015 sec
13:08:36	CREATE TABLE Persons ( PersonId INT, LastName VARBINARY(255), FirstName VARBINARY (255), Address VARBINARY(255), City VARBINARY(255) );	0 row(s) affected	0.0069 sec
13:08:36	ALTER TABLE Persons ADD DateOfBirth DATE	0 row(s) affected Records: 0 Duplicates: 0 Warning... 1 warning(s)	0.0082 sec
13:09:27	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create database: file ...	0.00073 sec
13:09:27	USE databasename	0 row(s) affected	0.00013 sec
13:09:27	CREATE TABLE Persons ( PersonId INT, LastName VARBINARY(255), FirstName VARBINARY (255), Address VARBINARY(255), City VARBINARY(255) );	Error Code: 1050. Table 'persons' already exists	0.00048 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-7

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

- Tables
  - Persons
    - Columns
      - PersonId
      - LastName
      - FirstName
      - Address
      - City
    - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE IF NOT EXISTS Persons (  
 PersonId INT,  
 LastName VARBINARY(255),  
 FirstName VARBINARY (255),  
 Address VARBINARY(255),  
 City VARBINARY(255)  
);  
ALTER TABLE Persons  
DROP COLUMN DateOfBirth;

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

100% 3:9

Action Output

	Time	Action	Response	Duration / Fetch Time
⚠ 24	13:10:41	CREATE TABLE IF NOT EXISTS Persons ( PersonId INT, LastName VARBINARY... 0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00067 sec	
✖ 25	13:10:41	ALTER TABLE Persons ADD DateOfBirth DATE Error Code: 1060. Duplicate column name 'DateOfBirth'...	0.00052 sec	
⚠ 26	13:10:59	CREATE DATABASE IF NOT EXISTS databasename 1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00054 sec	
✓ 27	13:10:59	USE databasename 0 row(s) affected	0.00013 sec	
⚠ 28	13:10:59	CREATE TABLE IF NOT EXISTS Persons ( PersonId INT, LastName VARBINARY... 0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00051 sec	
✓ 29	13:10:59	ALTER TABLE Persons DROP COLUMN DateOfBirth 0 row(s) affected Records: 0 Duplicates: 0 Warning...	0.015 sec	

Query Completed

# Ex-8

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename Tables

Persons Columns ID LastName FirstName Age

Indexes Foreign Keys Triggers Views Stored Procedures Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;

USE databasename;

CREATE TABLE IF NOT EXISTS Persons (

ID INT NOT NULL,

LastName VARBINARY(255) NOT NULL,

FirstName VARBINARY (255) NOT NULL,

Age INT

);

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

100% 18:2

Action Output

	Time	Action	Response	Duration / Fetch Time
2	19:54:13	USE databasename	0 row(s) affected	0.00046 sec
3	19:54:13	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBIL...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.0067 sec
4	19:54:46	drop TABLE Persons	0 row(s) affected	0.024 sec
5	19:54:51	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00052 sec
6	19:54:51	USE databasename	0 row(s) affected	0.00015 sec
7	19:54:51	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBIL...	0 row(s) affected	0.012 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-9

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename Tables

Persons Columns

ID LastName FirstName Age

Indexes Foreign Keys Triggers Views Stored Procedures Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE IF NOT EXISTS Persons (  
 ID INT NOT NULL,  
 LastName VARBINARY(255) NOT NULL,  
 FirstName VARBINARY (255) NOT NULL,  
 Age INT  
);  
ALTER TABLE Persons  
MODIFY Age INT NOT NULL;

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

100% 25:10

Action Output

	Time	Action	Response	Duration / Fetch Time
6	19:54:51	USE databasename	0 row(s) affected	0.00015 sec
7	19:54:51	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB... 8 19:55:48 CREATE DATABASE IF NOT EXISTS databasename 9 19:55:48 USE databasename 10 19:55:48 CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB... 11 19:55:49 ALTER TABLE Persons MODIFY Age INT NOT NULL	0 row(s) affected	0.012 sec
8	19:55:48	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create database: file ...	0.00077 sec
9	19:55:48	USE databasename	0 row(s) affected	0.00027 sec
10	19:55:48	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB... 11 19:55:49 ALTER TABLE Persons MODIFY Age INT NOT NULL	0 row(s) affected, 1 warning(s): 1050 Table 'Persons' ...	0.0011 sec
11	19:55:49	ALTER TABLE Persons MODIFY Age INT NOT NULL	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.015 sec

Query Completed

# Ex-10

A

The screenshot shows a database management interface with a dark theme. On the left, a sidebar titled "Administration" contains a "SCHEMAS" section with a tree view. Under "databasename", the "Tables" node is expanded, showing a "Persons" table with columns: ID, LastName, FirstName, and Age. Other nodes like "Indexes", "Foreign Keys", "Triggers", "Views", "Stored Procedures", and "Functions" are also listed. Below the tree, there's a "sys" node. At the top, a toolbar has icons for file operations, search, and help. The main area is titled "Section-2" and contains a code editor with the following SQL script:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
4     ID INT NOT NULL,
5     LastName VARBINARY(255) NOT NULL,
6     FirstName VARBINARY (255) NOT NULL,
7     Age INT,
8     UNIQUE (ID)
9 );
```

To the right of the code editor, a message states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." At the bottom, there's an "Action Output" section with a table showing the execution log:

	Time	Action	Response	Duration / Fetch Time
9	19:55:48	USE databasename	0 row(s) affected	0.00027 sec
10	19:55:48	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB... 11 19:55:49 ALTER TABLE Persons MODIFY Age INT NOT NULL 12 19:56:35 CREATE DATABASE IF NOT EXISTS databasename 13 19:56:35 USE databasename 14 19:56:35 CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.0011 sec
11	19:55:49	ALTER TABLE Persons MODIFY Age INT NOT NULL	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.015 sec
12	19:56:35	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00061 sec
13	19:56:35	USE databasename	0 row(s) affected	0.00016 sec
14	19:56:35	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARB...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00082 sec

At the very bottom, a status bar says "Query Completed".

# Ex-10

B

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Schemas Panel:** Shows the database structure. Under the database name, the **Tables** node is selected, displaying the **Persons** table with columns ID, LastName, FirstName, and Age. Other nodes include **Columns**, **Indexes**, **Foreign Keys**, **Triggers**, **Views**, **Stored Procedures**, and **Functions**. The **sys** node is also listed.
- Query Editor:** Displays the following SQL script:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
4     ID INT NOT NULL,
5     LastName VARBINARY(255) NOT NULL,
6     FirstName VARBINARY (255) NOT NULL,
7     Age INT,
8     CONSTRAINT UC_Person UNIQUE (ID,LastName)
9 );
```
- Action Output:** Shows the execution log with the following entries:

Time	Action	Response	Duration / Fetch Time
9 19:55:48	USE databasename	0 row(s) affected	0.00027 sec
10 19:55:48	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.0011 sec
11 19:55:49	ALTER TABLE Persons MODIFY Age INT NOT NULL	0 row(s) affected Records: 0 Duplicates: 0 Warnings...	0.015 sec
12 19:56:35	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00061 sec
13 19:56:35	USE databasename	0 row(s) affected	0.00016 sec
14 19:56:35	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00082 sec
- Bottom Status:** SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

A note on the right side of the interface states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

# Ex-II

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Schemas Panel:** Shows the database structure. Under the database name, the **Tables** node is selected, displaying the **Persons** table with columns ID, LastName, FirstName, and Age. Other nodes include Columns, Indexes, Foreign Keys, Triggers, Views, Stored Procedures, Functions, and sys.
- Query Editor:** Contains the following SQL code:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
4     ID INT NOT NULL,
5     LastName VARBINARY(255) NOT NULL,
6     FirstName VARBINARY (255) NOT NULL,
7     Age INT,
8     CONSTRAINT UC_Person UNIQUE (ID,LastName)
9 );
10 • ALTER TABLE Persons
11     DROP INDEX UC_Person;
```
- Action Output:** A table showing the execution results of the queries.

Action	Time	Response	Duration / Fetch Time
9 USE databasename	19:55:48	0 row(s) affected	0.00027 sec
10 CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	19:55:48	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.0011 sec
11 ALTER TABLE Persons MODIFY Age INT NOT NULL	19:55:49	0 row(s) affected Records: 0 Duplicates: 0 Warnings... 0.015 sec	
12 CREATE DATABASE IF NOT EXISTS databasename	19:56:35	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00061 sec
13 USE databasename	19:56:35	0 row(s) affected	0.00016 sec
14 CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	19:56:35	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00082 sec
- Status Bar:** Query interrupted.

A note on the right side of the interface states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

# Ex-12

A

The screenshot shows a database management interface with a dark theme. On the left, a sidebar titled "Administration" displays the "SCHEMAS" section, which includes a tree view of objects under "databasename". The "Tables" node is expanded, showing "Persons" with columns "ID", "LastName", "FirstName", and "Age". Other nodes like "Indexes", "Foreign Keys", "Triggers", "Views", "Stored Procedures", and "Functions" are also listed. Below the schema browser is a toolbar with various icons. The main area is titled "Section-2" and contains a code editor with the following SQL script:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
4     ID INT NOT NULL,
5     LastName VARBINARY(255) NOT NULL,
6     FirstName VARBINARY (255) NOT NULL,
7     Age INT,
8     PRIMARY KEY (ID)
9 );
```

To the right of the code editor is a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." At the bottom, there is an "Action Output" section showing the execution log:

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE IF NOT EXISTS databasename	19:59:26	1 row(s) affected, 1 warning(s): 100/ Can't create dat...	0.000/4 sec
USE databasename	19:59:26	0 row(s) affected	0.00012 sec
CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBIL...	19:59:26	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00051 sec
CREATE DATABASE IF NOT EXISTS databasename	19:59:30	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
USE databasename	19:59:30	0 row(s) affected	0.00012 sec
CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBIL...	19:59:30	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec

The log shows several errors related to table creation due to existing tables with the same name.

# Ex-12

B

Local instance 3306

Administration Schemas Section-2\*

SCHEMAS Filter objects

databasename

Tables

Persons

Columns

ID

LastName

FirstName

Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;

USE databasename;

CREATE TABLE IF NOT EXISTS Persons (

    ID INT NOT NULL,

    LastName VARBINARY(255) NOT NULL,

    FirstName VARBINARY (255) NOT NULL,

    Age INT,

    CONSTRAINT PRIMARY KEY PK\_Person (ID,LastName)

);

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

100% 37:8

Action Output

Time	Action	Response	Duration / Fetch Time
16 19:59:26	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 100/ Can't create dat...	0.000/4 sec
17 19:59:26	USE databasename	0 row(s) affected	0.00012 sec
18 19:59:26	CREATE TABLE IF NOT EXISTS Persons (	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00051 sec
19 19:59:30	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
20 19:59:30	USE databasename	0 row(s) affected	0.00012 sec
21 19:59:30	CREATE TABLE IF NOT EXISTS Persons (	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec

Query Completed

# Ex-13

A

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Schemas Panel:** Shows the database structure. Under the database name, there is a table named "Persons" with columns ID, LastName, FirstName, and Age. There are also Indexes, Foreign Keys, Triggers, Views, Stored Procedures, and Functions.
- Code Editor:** Displays T-SQL code for creating a database and tables.

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
    PersonID INT NOT NULL,
    LastName VARBINARY(255) NOT NULL,
    FirstName VARBINARY (255) NOT NULL,
    Age INT,
    PRIMARY KEY (PersonID)
);
10 • CREATE TABLE IF NOT EXISTS Orders (
    OrderID INT NOT NULL,
    LastName VARBINARY(255) NOT NULL,
    FirstName VARBINARY (255) NOT NULL,
    Age INT,
    PRIMARY KEY (OrderID),
    FOREIGN KEY (PersonID) REFERENCES Persons(PersonID)
);
17 );
```
- Action Output:** Shows the execution results of the queries.

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE IF NOT EXISTS databasename	19:59:30	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
USE databasename	19:59:30	0 row(s) affected	0.00012 sec
CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBII...	19:59:30	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec
CREATE DATABASE IF NOT EXISTS databasename	20:02:21	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00059 sec
USE databasename	20:02:21	0 row(s) affected	0.00013 sec
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL, LastName...	20:02:21	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00048 sec
- Status Bar:** Query interrupted.

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

# Ex-13

B

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2\*, Context Help, Snippets.
- Schemas Panel:** Shows the database structure. Under the database name, there is a table named "Persons" with columns ID, LastName, FirstName, and Age. There are also Indexes, Foreign Keys, Triggers, Views, Stored Procedures, and Functions.
- Code Editor:** Displays T-SQL code for creating a database and tables.

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
    PersonID INT NOT NULL,
    LastName VARBINARY(255) NOT NULL,
    FirstName VARBINARY (255) NOT NULL,
    Age INT,
    PRIMARY KEY (PersonID)
);
10 • CREATE TABLE IF NOT EXISTS Orders (
    OrderID INT NOT NULL,
    LastName VARBINARY(255) NOT NULL,
    FirstName VARBINARY (255) NOT NULL,
    Age INT,
    PRIMARY KEY (OrderID),
    CONSTRAINT FK_PersonsOrder FOREIGN KEY (PersonID)
        REFERENCES Persons(PersonID)
);
18 );
```
- Action Output:** Shows the execution results of the queries.

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE IF NOT EXISTS databasename	19:59:30	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
USE databasename	19:59:30	0 row(s) affected	0.00012 sec
CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBII...	19:59:30	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec
CREATE DATABASE IF NOT EXISTS databasename	20:02:21	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00059 sec
USE databasename	20:02:21	0 row(s) affected	0.00013 sec
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL, LastName...	20:02:21	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00048 sec
- Status:** Query interrupted.

A note on the right side of the interface states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

# Ex-14

A

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

Tables

Persons

Columns

ID

LastName

FirstName

Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;

USE databasename;

CREATE TABLE IF NOT EXISTS Persons (

PersonID INT NOT NULL,

LastName VARBINARY(255) NOT NULL,

FirstName VARBINARY (255) NOT NULL,

Age INT,

CHECK (Age >= 18);

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

100% 22:8

Action Output

	Time	Action	Response	Duration / Fetch Time
19	19:59:30	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
20	19:59:30	USE databasename	0 row(s) affected	0.00012 sec
21	19:59:30	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec
22	20:02:21	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00059 sec
23	20:02:21	USE databasename	0 row(s) affected	0.00013 sec
24	20:02:21	CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL, LastName...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00048 sec

Query Completed

# Ex-14

B

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Left Sidebar (Schemas):** Shows the database structure:
  - database name (selected)
  - Tables
    - Persons
      - Columns: ID, LastName, FirstName, Age
      - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions
  - sys
- Central Area (Section-2):** Displays the following SQL script:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 • USE databasename;
3 • CREATE TABLE IF NOT EXISTS Persons (
4     PersonID INT NOT NULL,
5     LastName VARBINARY(255) NOT NULL,
6     FirstName VARBINARY (255) NOT NULL,
7     Age INT,
8     City VARBINARY (255),
9     CONSTRAINT CHK_Person CHECK (Age >= 18 And City = "Sandnes")
10 );
11 |
```
- Right Panel:** A message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."
- Action Output:** Shows the execution log:

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE IF NOT EXISTS databasename	19:59:30	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
USE databasename	19:59:30	0 row(s) affected	0.00012 sec
CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	19:59:30	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec
CREATE DATABASE IF NOT EXISTS databasename	20:02:21	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00059 sec
USE databasename	20:02:21	0 row(s) affected	0.00013 sec
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL, LastName...	20:02:21	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00048 sec
- Bottom Status:** SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-15

Local instance 3306

Administration Schemas Section-2\*

SCHEMAS

Filter objects

databasename

Tables

Persons

Columns

ID

LastName

FirstName

Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;

USE databasename;

CREATE TABLE IF NOT EXISTS Persons (

PersonID INT NOT NULL,

LastName VARBINARY(255) NOT NULL,

FirstName VARBINARY (255) NOT NULL,

Age INT,

City VARBINARY (255) DEFAULT "Sandnes"

);

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

100% 43:8

Action Output

	Time	Action	Response	Duration / Fetch Time
19	19:59:30	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00047 sec
20	19:59:30	USE databasename	0 row(s) affected	0.00012 sec
21	19:59:30	CREATE TABLE IF NOT EXISTS Persons ( ID INT NOT NULL, LastName VARBI...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00052 sec
22	20:02:21	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00059 sec
23	20:02:21	USE databasename	0 row(s) affected	0.00013 sec
24	20:02:21	CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL, LastName...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00048 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-16

The screenshot shows a database management interface with the following components:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Left Sidebar (Schema Browser):** SCHEMAS, Filter objects, database name, Tables (Persons), Columns (ID, LastName, FirstName, Age), Indexes, Foreign Keys, Triggers, Views, Stored Procedures, Functions, sys.
- Middle Panel (Query Editor):** CREATE DATABASE IF NOT EXISTS databasename; USE databasename; CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL AUTO\_INCREMENT, LastName VARBINARY(255) NOT NULL, FirstName VARBINARY (255) NOT NULL, Age INT, PRIMARY KEY (PersonID) );
- Right Panel (Help):** Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.
- Bottom Panel (Action Output):** Action Output, Time, Action, Response, Duration / Fetch Time.

Action	Time	Response	Duration / Fetch Time
CREATE DATABASE IF NOT EXISTS databasename	20:08:23	1 row(s) affected, 1 warning(s): 100/ Can't create dat...	0.00092 sec
USE databasename	20:08:23	0 row(s) affected	0.00020 sec
CREATE TABLE Orders ( OrderID INT NOT NULL, OrderNumber INT NOT NU...	20:08:23	Error Code: 1064. You have an error in your SQL synt...	0.00076 sec
CREATE DATABASE IF NOT EXISTS databasename	20:33:04	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.0014 sec
USE databasename	20:33:04	0 row(s) affected	0.00022 sec
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT NOT NULL AUTO_INCR...	20:33:04	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00087 sec
- Bottom Status Bar:** Query Completed



# Exercises

# Ex-1

The screenshot shows the Oracle SQL Developer interface. The title bar reads "Local instance 3306". The left sidebar has tabs for "Administration" and "Schemas", with "Schemas" selected. Under "SCHEMAS", there are entries for "sys" and "testdb". The main workspace contains a query editor with the following content:

```
1 CREATE DATABASE IF NOT EXISTS testdb;
```

Below the query editor is a status bar showing "100% 38:1". At the bottom of the screen, there is an "Action Output" section with a table:

	Time	Action	Response	Duration / Fetch Time
1	20:43:59	drop database Market	3 row(s) affected	0.011 sec
2	21:07:46	CREATE DATABASE IF NOT EXISTS testdb	1 row(s) affected	0.0030 sec

The status bar at the bottom of the interface also displays "Query Completed".

# Ex-2

The screenshot shows the MySQL Workbench interface with the title bar "Local instance 3306". The left sidebar is titled "Administration" and "Schemas", with "SCHEMAS" selected. A search bar says "Filter objects" and shows a result for "sys". The main query editor has a tab "Section-2" and contains the following SQL code:

```
1  DROP DATABASE IF EXISTS testdb;
```

A message on the right side of the interface states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

The bottom section shows the "Action Output" table with the following data:

	Time	Action	Response	Duration / Fetch Time
1	20:43:59	drop database Market	3 row(s) affected	0.011 sec
2	21:07:46	CREATE DATABASE IF NOT EXISTS testdb	1 row(s) affected	0.0030 sec
3	21:08:49	DROP DATABASE IF EXISTS testdb	0 row(s) affected	0.0052 sec

The status bar at the bottom says "Query Completed".

# Ex-3

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

Tables

Persons

Columns

ID

LastName

FirstName

Address

City

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE Persons (  
 ID INT,  
 LastName VARBINARY (255),  
 FirstName VARBINARY (255),  
 Address VARBINARY(255),  
 City VARBINARY(255)  
);  
ALTER TABLE Persons  
ADD CONSTRAINT UC\_Person UNIQUE (ID,LastName);

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

100% 26:11

Action Output

	Time	Action	Response	Duration / Fetch Time
3	21:08:49	DROP DATABASE IF EXISTS testdb	0 row(s) affected	0.0052 sec
4	21:11:41	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected	0.0012 sec
5	21:11:41	USE databasename	0 row(s) affected	0.00063 sec
6	21:11:41	CREATE TABLE Persons ( ID INT, LastName VARBINARY (255), FirstName VA... )	0 row(s) affected	0.010 sec
7	21:11:41	ALTER TABLE Persons ADD CONSTRAINT UC_Person UNIQUE (ID,LastName)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.011 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-4

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

Tables

Persons

Columns

ID

LastName

FirstName

Address

City

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE Persons (  
 ID INT,  
 LastName VARBINARY (255),  
 FirstName VARBINARY (255),  
 Address VARBINARY(255),  
 City VARBINARY(255)  
);  
ALTER TABLE Persons  
ADD CONSTRAINT PK\_Person PRIMARY KEY (ID,LastName);  
ALTER TABLE Persons  
DROP PRIMARY KEY;

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

100% 18:13

Action Output

	Time	Action	Response	Duration / Fetch Time
3	21:08:49	DROP DATABASE IF EXISTS testdb	0 row(s) affected	0.0052 sec
4	21:11:41	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected	0.0012 sec
5	21:11:41	USE databasename	0 row(s) affected	0.00063 sec
6	21:11:41	CREATE TABLE Persons ( ID INT, LastName VARBINARY (255), FirstName VA... 0 row(s) affected	0 row(s) affected	0.010 sec
7	21:11:41	ALTER TABLE Persons ADD CONSTRAINT UC_Person UNIQUE (ID,LastName)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.011 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'

# Ex-5

Local instance 3306

Administration Schemas Section-2

SCHEMAS Filter objects

databasename

- Tables
  - Orders
    - Columns
      - OrderID
      - OrderNumber
      - PersonID
    - Indexes
    - Foreign Keys
    - Triggers
  - Persons
    - Columns
      - PersonID
      - LastName
      - FirstName
      - Address
      - City
    - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions
- sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT, LastName VARBINARY (255), FirstName VARBINARY (255), Address VARBINARY(255), City VARBINARY(255) );  
USE databasename;  
CREATE TABLE IF NOT EXISTS Orders ( OrderID INT, OrderNumber INT, PersonID INT );  
ALTER TABLE Orders  
ADD FOREIGN KEY (PersonID) REFERENCES Persons(PersonID);  
ALTER TABLE Orders  
DROP FOREIGN KEY FK\_PersonOrder;

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

100% 33:19

Action Output

	Time	Action	Response	Duration / Fetch Time
⚠ 28	21:25:07	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.000050 sec
✓ 29	21:25:07	USE databasename	0 row(s) affected	0.000011 sec
⚠ 30	21:25:07	CREATE TABLE IF NOT EXISTS Persons ( PersonID INT, LastName VARBINAR...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.000047 sec
✓ 31	21:25:07	USE databasename	0 row(s) affected	0.000089 sec
⚠ 32	21:25:07	CREATE TABLE IF NOT EXISTS Orders ( OrderID INT, OrderNumber INT, Pers...	0 row(s) affected, 1 warning(s): 1050 Table 'Orders' a...	0.000028 sec

Query Completed

# Ex-6

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

SCHEMAS Filter objects

databasename

- Tables
  - Orders
    - Columns
      - OrderID
      - OrderNumber
      - PersonID
    - Indexes
    - Foreign Keys
    - Triggers
  - Persons
  - Views
  - Stored Procedures
  - Functions
- sys

CREATE DATABASE IF NOT EXISTS databasename;  
USE databasename;  
CREATE TABLE IF NOT EXISTS Persons (  
 PersonID INT,  
 LastName VARBINARY (255),  
 FirstName VARBINARY (255),  
 Age INT  
);  
ALTER TABLE Persons  
ADD CONSTRAINT CHK\_PersonAge CHECK (Age >= 18);  
ALTER TABLE Persons  
DROP CHECK CHK\_PersonAge;

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

100% 26:12

Action Output

Time	Action	Response	Duration / Fetch Time
30 21:25:07	CREATE TABLE IF NOT EXISTS Persons ( PersonID INT, LastName VARBINAR...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00047 sec
31 21:25:07	USE databasename	0 row(s) affected	0.000089 sec
32 21:25:07	CREATE TABLE IF NOT EXISTS Orders ( OrderID INT, OrderNumber INT, Pers...	0 row(s) affected, 1 warning(s): 1050 Table 'Orders' a...	0.00028 sec
33 21:27:44	CREATE DATABASE IF NOT EXISTS databasename	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00097 sec
34 21:27:44	USE databasename	0 row(s) affected	0.00014 sec
35 21:27:44	CREATE TABLE IF NOT EXISTS Persons ( PersonID INT, LastName VARBINA...	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'...	0.00069 sec

Query interrupted

# Ex-7

The screenshot shows a database management interface with the following details:

- Top Bar:** Local instance 3306, Administration, Schemas, Section-2, Context Help, Snippets.
- Schemas Panel:** Shows the database structure for 'databasename'. Under 'Tables', it lists 'Orders' with columns 'OrderID', 'OrderNumber', and 'PersonID'. Other objects like 'Indexes', 'Foreign Keys', 'Triggers', 'Persons', 'Views', 'Stored Procedures', and 'Functions' are also listed.
- Query Editor:** Displays the following SQL code:

```
1 • CREATE DATABASE IF NOT EXISTS databasename;
2 USE databasename;
3 • ⊖ CREATE TABLE IF NOT EXISTS Persons (
4     PersonID INT,
5     LastName VARBINARY (255),
6     FirstName VARBINARY (255),
7     City VARBINARY (255)
8 );
9 • ALTER TABLE Persons
10    ALTER City SET DEFAULT "Sandnes";
```
- Action Output:** Shows the execution results of the queries:

Action	Time	Response	Duration / Fetch Time
ALTER TABLE Persons ALTER City SET DEFAULT "Sandnes"	21:29:07	0 row(s) affected Records: 0 Duplicates: 0 Warnings... 0.0033 sec	
CREATE DATABASE IF NOT EXISTS databasename	21:29:15	1 row(s) affected, 1 warning(s): 1007 Can't create dat... 0.00067 sec	
USE databasename	21:29:15	0 row(s) affected 0.00018 sec	
CREATE TABLE IF NOT EXISTS Persons ( PersonID INT, LastName VARBINAR...	21:29:15	0 row(s) affected, 1 warning(s): 1050 Table 'Persons'... 0.00067 sec	
ALTER TABLE Persons ALTER City SET DEFAULT "Sandnes"	21:29:15	0 row(s) affected Records: 0 Duplicates: 0 Warnings... 0.0061 sec	
- Status:** Query Completed.

A note on the right side of the interface states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."



# Tasks

T-1

Local instance 3306

Administration Schemas Section-2 Context Help Snippets

Filter objects

SCHEMAS

- Tables
  - Customers
    - Columns
      - CustomerID
      - FirstName
      - LastName
    - Indexes
    - Foreign Keys
    - Triggers
  - Orders
    - Columns
      - OrderID
      - OrderName
      - OrderDate
      - CustomerID
    - Indexes
    - Foreign Keys
    - Triggers
  - Products
    - Columns
      - ProductID
      - ProductPrice
      - ProductType
      - ORDERID
    - Indexes
    - Foreign Keys
    - Triggers
  - Views
  - Stored Procedures
  - Functions
  - sys

CREATE DATABASE IF NOT EXISTS Market;

USE Market;

CREATE TABLE IF NOT EXISTS Customers (
 CustomerID INT PRIMARY KEY AUTO\_INCREMENT,
 FirstName VARBINARY(255) NOT NULL,
 LastName VARBINARY(255) NOT NULL UNIQUE
);

USE Market;

CREATE TABLE IF NOT EXISTS Orders (
 OrderID INT PRIMARY KEY AUTO\_INCREMENT,
 OrderName VARBINARY(255) NOT NULL,
 OrderDate TIMESTAMP NOT NULL,
 CustomerID INT,
 FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)
);

USE Market;

CREATE TABLE IF NOT EXISTS Products (
 ProductID INT PRIMARY KEY AUTO\_INCREMENT,
 ProductPrice DECIMAL(3,2),
 ProductType VARBINARY(255) DEFAULT "Apple",
 ORDERID INT,
 FOREIGN KEY (OrderID) REFERENCES Orders(OrderID)
);

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

Action Output

	Time	Action	Response	Duration / Fetch Time
18	21:50:43	CREATE TABLE IF NOT EXISTS Customers ( CustomerID INT PRIMARY KEY A...	0 row(s) affected, 1 warning(s): 1050 Table 'Customer...'...	0.00047 sec
19	21:50:43	USE Market	0 row(s) affected	0.00012 sec
20	21:50:43	CREATE TABLE IF NOT EXISTS Orders ( OrderID INT PRIMARY KEY AUTO_IN...	0 row(s) affected, 1 warning(s): 1050 Table 'Orders' al...	0.0012 sec
21	21:50:43	USE Market	0 row(s) affected	0.000092 sec
22	21:50:43	CREATE TABLE IF NOT EXISTS Products ( ProductID INT PRIMARY KEY AUT...	0 row(s) affected, 1 warning(s): 1050 Table 'Products' ...	0.0012 sec

SQL script saved to '/Users/ahmedkandil/Desktop/Section-2.sql'