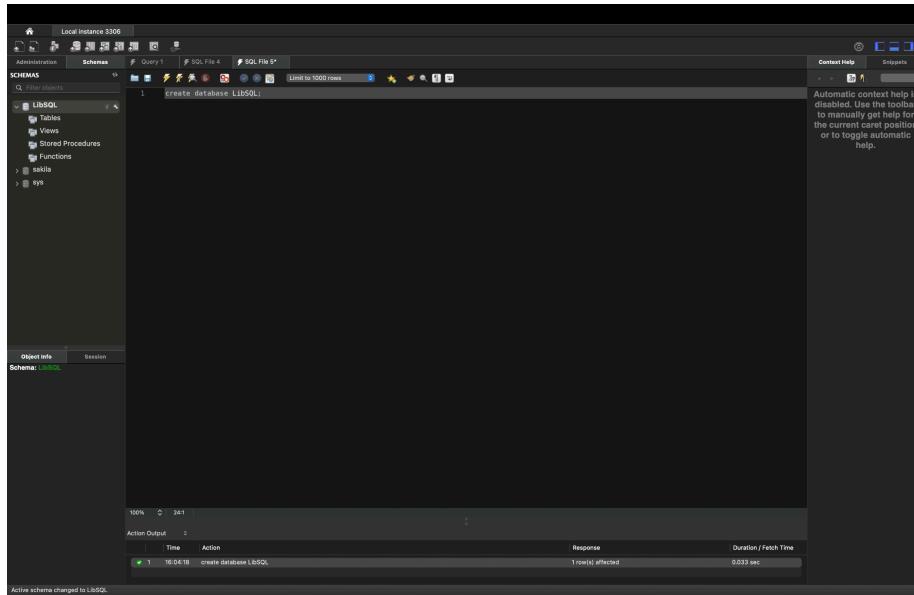


IST210 Project Part 2
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Making database and tables

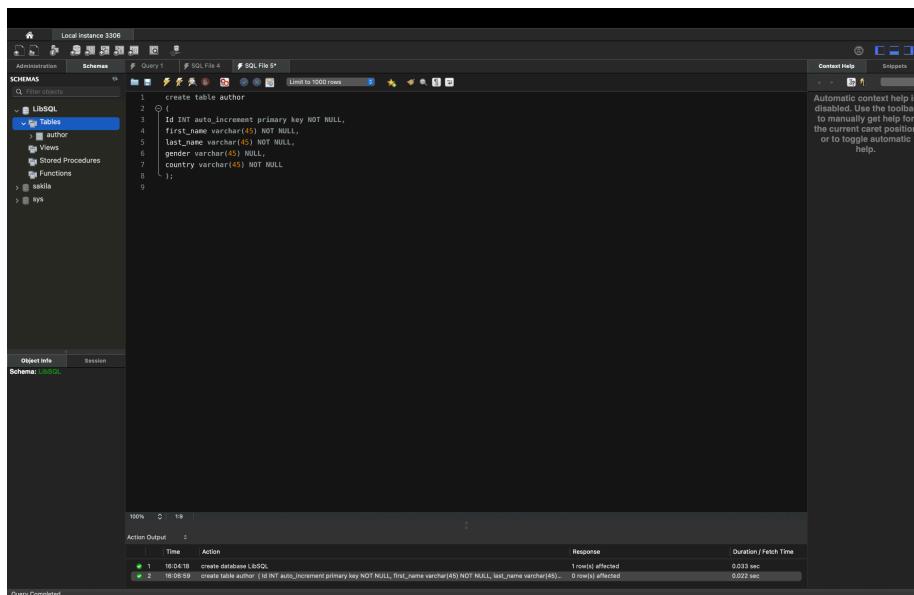
1.



The screenshot shows the SQL Server Management Studio interface. In the Object Explorer, under the 'LibSQL' schema, there is a 'Tables' folder. In the 'Tables' folder, there is a single table named 'author'. The 'author' table has four columns: 'Id' (INT auto-increment primary key NOT NULL), 'first_name' (varchar(45) NOT NULL), 'last_name' (varchar(45) NOT NULL), and 'gender' (varchar(45) NULL). The 'author' table is currently selected in the Object Explorer. The status bar at the bottom left says 'Active schema changed to LibSQL'.

create database LibSQL

2.



The screenshot shows the SQL Server Management Studio interface. In the Object Explorer, under the 'LibSQL' schema, there is a 'Tables' folder. In the 'Tables' folder, there is a single table named 'author'. The 'author' table has four columns: 'Id' (INT auto-increment primary key NOT NULL), 'first_name' (varchar(45) NOT NULL), 'last_name' (varchar(45) NOT NULL), and 'gender' (varchar(45) NULL). The 'author' table is currently selected in the Object Explorer. The status bar at the bottom left says 'Query Completed'.

create table author
(
Id INT auto_increment primary key NOT NULL,
first_name varchar(45) NOT NULL,
last_name varchar(45) NOT NULL,
gender varchar(45) NULL,

```
country varchar(45) NOT NULL  
);
```

3.

The screenshot shows the MySQL Workbench interface with the 'Local Instance 3306' connection selected. In the left sidebar, under the 'Schemas' section, the 'LIBSQL' schema is chosen. The 'Tables' section contains two tables: 'author' and 'genre'. The 'author' table has columns 'id' (INT auto-increment primary key NOT NULL), 'first_name' (varchar(45) NOT NULL), and 'last_name' (varchar(45)). The 'genre' table has columns 'id' (INT auto-increment primary key NOT NULL) and 'genre' (varchar(45) NOT NULL). The central pane displays the SQL query:

```
create table genre  
(  
    id INT auto_increment primary key NOT NULL,  
    genre varchar(45) NOT NULL);
```

The status bar at the bottom right indicates 'Query Completed'.

```
create table genre  
(  
    id INT auto_increment primary key NOT NULL,  
    genre varchar(45) NOT NULL);
```

4.

The screenshot shows the MySQL Workbench interface with the 'Local Instance 3306' connection selected. In the left sidebar, under the 'Schemas' section, the 'LIBSQL' schema is chosen. The 'Tables' section contains three tables: 'author', 'genre', and 'payment_method'. The 'payment_method' table has columns 'id' (INT auto-increment primary key NOT NULL) and 'name' (varchar(45) NOT NULL). The central pane displays the SQL query:

```
create table payment_method  
(  
    id INT auto_increment primary key NOT NULL,  
    name varchar(45) NOT NULL  
);
```

The status bar at the bottom right indicates 'Query Completed'.

```
create table payment_method  
(  
    id INT auto_increment primary key NOT NULL,  
    name varchar(45) NOT NULL
```

);

5.

The screenshot shows a SQL interface with a dark theme. On the left, the 'SCHEMAS' tree view shows a single schema 'libSQL' containing a table 'plan'. The table definition is displayed in the main pane:

```
create table plan
(
    planId varchar(8) primary key NOT NULL,
    name varchar(45) NOT NULL,
    type varchar(45) NOT NULL,
    price float NOT NULL
);
```

A tooltip on the right explains: "Automatic context help is disabled. Use the toolbar to manually get help for the current selected command or to toggle automatic help."

At the bottom, the 'Response' section shows the execution log:

Action	Output	Time	Action	Response	Duration / Fetch Time
6	16:17:30	create table plan (planId varchar(8) primary key NOT NULL, name varchar(45) NOT NULL, type varchar(45) NO... Error Code: 1063 Incorrect column specifier for column 1.			0.00022 sec
7	16:17:30	create table plan (planId varchar(8) primary key NOT NULL, name varchar(45) NOT NULL, type varchar(45) NOT NULL, price fl... 0 row(s) affected			0.019 sec

Below the log, it says 'Query Completed'.

```
create table plan
(
    planId varchar(8) primary key NOT NULL,
    name varchar(45) NOT NULL,
    type varchar(45) NOT NULL,
    price float NOT NULL
);
```

6.

The screenshot shows the MySQL Workbench interface with the 'Local Instance 3306' connection selected. In the left sidebar, under the 'Schemas' section, the 'LMSQL' schema is expanded, showing tables like 'author', 'genre', 'payment_method', 'plan', 'publisher', and 'transaction'. The 'publisher' table is currently selected. The main pane displays the SQL query:

```
create table publisher
(
    id varchar(8) primary key not null,
    name varchar(45) not null,
    country varchar(45) not null,
    date_established DATETIME not null
);
```

The status bar at the bottom right indicates 'Query Completed'.

```
create table publisher
(
    id varchar(8) primary key not null,
    name varchar(45) not null,
    country varchar(45) not null,
    date_established DATETIME not null
);
```

The screenshot shows the MySQL Workbench interface with the 'Local Instance 3306' connection selected. In the left sidebar, under the 'Schemas' section, the 'LMSQL' schema is expanded, showing tables like 'author', 'books', 'checkout_cart', 'genre', 'payment_method', 'plan', 'publisher', 'transaction', 'user', and 'view'. The 'publisher' table is currently selected. The main pane displays the SQL query:

```
alter table publisher
add column state varchar(45) not null;
```

The status bar at the bottom right indicates 'Query Completed'.

```
alter table publisher
add column state varchar(45) not null;
```

7.

The screenshot shows the MySQL Workbench interface with the following details:

- Left Panel (Schemas):** Shows the schema structure with the 'user' table selected under the 'Tables' node.
- Central Panel (Query Editor):** Displays the SQL code for creating the 'user' table:

```
1 * create table user
2 * (
3 *     username varchar(45) primary key not null,
4 *     first_name varchar(45) not null,
5 *     last_name varchar(45) not null,
6 *     gender varchar(45) null,
7 *     DOB date not null,
8 *     email varchar(45) not null,
9 *     registration_date DATETIME not null,
10 *     street varchar(45) not null,
11 *     state varchar(45) not null,
12 *     fav_author INT null,
13 * );
14 * foreign key (fav_author) references author(id)
15 *
16 *
```
- Bottom Panel (Object Info):** Provides detailed information about the 'user' table, including columns like id, first_name, last_name, gender, DOB, email, registration_date, street, state, and fav_author.
- Action Output:** Shows the execution results of the query, indicating 0 rows affected and 0.0087 sec duration.

```
create table user
(
username varchar(45) primary key not null,
first_name varchar(45) not null,
last_name varchar(45) not null,
gender varchar(45) null,
DOB date not null,
email varchar(45) not null,
registration_date DATETIME not null,
street varchar(45) not null,
state varchar(45) not null,
```

```

fav_author INT null,
foreign key (fav_author) references author(id)
);

```

8.

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** The current schema is 'lmsSQL'.
- Tables:** The 'books' table is selected.
- Code Editor:** The SQL code for creating the 'books' table is displayed:


```

create table books
(
    isbn varchar(15) primary key not null,
    title varchar(45) not null,
    author int not null,
    genre int not null,
    page int not null,
    format varchar(45) not null,
    publication_date date null,
    publisher varchar(45) not null,
    language varchar(45) not null,
    price float not null,
    foreign key (author) references author(id),
    foreign key (genre) references genre(id),
    foreign key (publisher) references publisher(id)
);
      
```
- Object Info:** Shows the table structure with columns: isbn, title, author, genre, page, format, publication_date, publisher, language, and price.
- Action Output:** Displays the results of the query execution:

Time	Action	Response	Duration / Fetch Time
0 16:23:56	create table books (isbn varchar(15) primary key not null, title varchar(45) not null, author int not null, genre int not null, page int not null, format varchar(45) not null, publication_date date null, publisher varchar(45) not null, language varchar(45) not null, price float not null, foreign key (author) references author(id), foreign key (genre) references genre(id), foreign key (publisher) references publisher(id))	0 rows affected	0.011 sec
0 16:23:48	create table books (isbn varchar(15) primary key not null, title varchar(45) not null, author int not null, genre int not null, page int not null, format varchar(45) not null, publication_date date null, publisher varchar(45) not null, language varchar(45) not null, price float not null, foreign key (author) references author(id), foreign key (genre) references genre(id), foreign key (publisher) references publisher(id))	0 rows affected	0.015 sec

```

create table books
(
    isbn varchar(15) primary key not null,
    title varchar(45) not null,
    author int not null,
    genre int not null,
    page int not null,
    format varchar(45) not null,
    publication_date date null,
    publisher varchar(45) not null,
    language varchar(45) not null,
    price float not null,
    foreign key (author) references author(id),
    foreign key (genre) references genre(id),
    foreign key (publisher) references publisher(id)
);

```

9.

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** The current schema is 'tibsql'. Other schemas listed include 'author', 'books', 'checkout_cart', 'genre', 'payment_method', 'plan', 'publisher', 'user', and 'sys'.
- Query Editor:** The SQL tab contains the following code:

```
create table checkout_cart
(
    ord_no int primary key not null,
    ord_date datetime not null,
    receive_date date not null,
    user varchar(45) not null,
    payment int not null,
    foreign key (user) references user(username),
    foreign key (payment) references payment_method(id)
);
```
- Object Info:** A table named 'books' is selected. It has columns: title (with PK), author, genre, page, format, publisher, publication_date, publisher_name, language, price, and book_id.
- Action Output:** Shows two actions:
 - Action 1: 16-30-42 create table checkout_cart (ord_no int primary key not null, ord_date datetime not null, receive_date date not null, user varchar(45) not null, payment int not null, foreign key (user) references user(username), foreign key (payment) references payment_method(id))
 - Action 2: 16-34-10 create table checkout_cart (ord_no int primary key not null, ord_date datetime not null, receive_date date not null, user varchar(45) not null, payment int not null, foreign key (user) references user(username), foreign key (payment) references payment_method(id))Both actions show a duration of 0.001 sec and 0 row(s) affected.

```
create table checkout_cart
(
    ord_no int primary key not null,
    ord_date datetime not null,
    receive_date date not null,
    user varchar(45) not null,
    payment int not null,
    foreign key (user) references user(username),
    foreign key (payment) references payment_method(id)
);
```

10.

The screenshot shows the Oracle SQL Developer interface. In the top navigation bar, 'Local Instance 3306' is selected. The left sidebar displays the schema structure under 'Schemas'. A query window is open with the following SQL code:

```
create table SQLPlus
(
    memberId int not null,
    username varchar(45) not null,
    sub_date date not null,
    plan varchar(8) not null,
    autoPay boolean not null,
    preferredPay int null,
    foreign key (username) references user(username),
    foreign key (plan) references plan(planId),
    foreign key (preferredPay) references payment_method(id)
);
```

The bottom pane shows the execution results with two rows of data:

Action	Time	Response	Duration / Fetch Time
create table SQLPlus	12 16:34:10	memberId int no primary key not null, ord_no int primary key not null, ord_date datetime not null, receive_date date not null, user varchar(45) not null, sub_date date not null, plan varchar(8) not null, autoPay boolean not null, preferredPay int null, foreign key (username) references user(username), foreign key (plan) references plan(planId), foreign key (preferredPay) references payment_method(id)	0 rows(s) affected 0.013 sec
create table SQLPlus	13 16:38:50	memberId int not null, username varchar(45) not null, sub_date date not null, plan varchar(8) not null, autoPay boolean not null, preferredPay int null, foreign key (username) references user(username), foreign key (plan) references plan(planId), foreign key (preferredPay) references payment_method(id)	0 rows(s) affected 0.019 sec

create table SQLPlus

```
(  
    memberId int not null,  
    username varchar(45) not null,  
    sub_date date not null,  
    plan varchar(8) not null,  
    autoPay boolean not null,  
    preferredPay int null,
```

foreign key (username) references user(username),

```
foreign key (plan) references plan(planId),  
foreign key (preferredPay) references payment_method(id)  
);
```

```

ALTER TABLE `LIBSQL`.`SQLPlus`
CHANGE COLUMN `autoPay` `autoPay` VARCHAR(10) NOT NULL ;

```

Action Output:

Time	Action	Response	Duration / Fetch Time
141 17:14:11	Apply changes to SQLPlus		
142 17:14:22	ALTER TABLE `LIBSQL`.`SQLPlus` CHANGE COLUMN `autoPay` `autoPay` VARCHAR(10) NOT NULL	0 rows(s) affected 0 Duplicate(s) 0 Warning(s) 0.007 sec	

**ALTER TABLE `LibSQL`.`SQLPlus`
CHANGE COLUMN `autoPay` `autoPay` VARCHAR(10) NOT NULL ;**

11.

```

create table `transaction`
(
    id          VARCHAR(12) NOT NULL,
    title       VARCHAR(10) NOT NULL,
    author      VARCHAR(10) NOT NULL,
    genre       VARCHAR(5),
    page        NUMBER(4),
    total       NUMBER(4),
    publication_date DATE,
    publisher   VARCHAR(45),
    language    VARCHAR(45),
    price       NUMBER(4),
    book_id     NUMBER(4)
);

```

Action Output:

Time	Action	Response	Duration / Fetch Time
13 16:38:50	create table `transaction` (`id` VARCHAR(12) NOT NULL, `title` VARCHAR(10) NOT NULL, `author` VARCHAR(10) NOT NULL, `genre` VARCHAR(5), `page` NUMBER(4), `total` NUMBER(4), `publication_date` DATE, `publisher` VARCHAR(45), `language` VARCHAR(45), `price` NUMBER(4), `book_id` NUMBER(4))	0 rows(s) affected 0.019 sec	
14 16:42:37	create table `transaction` (`id` VARCHAR(12) NOT NULL, `ord_no` INT NOT NULL, `ord_qty` INT NOT NULL, `type` VARCHAR(5) NOT NULL, `foreign key` (`isbn`) REFERENCES books(`isbn`), `foreign key` (`ord_no`) REFERENCES checkout_cart(`ord_no`))	0 rows(s) affected 0.019 sec	

**create table `transaction`
(**

isbn varchar(12) not null,
ord_no int not null,
ord_qty int not null,
type varchar(5) not null,

foreign key (isbn) references books(isbn),
foreign key (ord_no) references checkout_cart(ord_no)
);

After wizard IMPORT

12.

The screenshot shows the MySQL Workbench interface with the 'author' table selected. The table structure is as follows:

	id	first_name	last_name	gender	country
1	1	Vitaly	Roma	Female	Sweden
2	2	Hilary	Krystian	Female	Sweden
3	3	Elton	Wade	Male	France
4	4	Mil	Giovanni	Male	France
5	5	Leanne	Wade	Male	Sweden
6	6	Karla	Tepanya	Male	Sweden
7	7	Bernie	O'Connorsane	Male	IT MySQL Workbench community-8.0.34
8	8	Elspeth	Wade	Male	Sweden
9	9	Virgil	Mercede	Male	Sweden
10	10	Elspeth	Wade	Male	United States
11	11	Freda	Ogdenby	Female	Canada
12	12	Freddie	Wade	Female	United States
13	13	Ros	Breneska	Female	Canada
14	14	Leanne	Wade	Female	Sweden
15	15	Alexandria	Perry	Female	France
16	16	Clyde	Wade	Male	Sweden
17	17	Elspeth	Corbinas	Male	Sweden
18	18	Dawn	Eusekier	Male	United States
19	19	Leanne	Wade	Female	United States
20	20	Macaula	Piper	Male	France
21	21	Freddie	Wade	Male	United States
22	22	Cod	Forsen	Male	France
23	23	Freddie	Wade	Male	United States
24	24	Petrie	McNaney	Female	France
25	25	Freddie	Wade	Male	United States
26	26	Achaeen	Yann	Male	France
27	27	Freddie	Wade	Male	United States
28	28	Manica	Loy	Male	United States
29	29	May	Ephrason	Male	Sweden
30	30	Elspeth	Wade	Female	United States
31	31	Emmeline	Wiley	Female	Sweden
32	32	Freddie	Wade	Male	United States
33	33	Kath	Oghorn	Female	Korea
34	34	Freddie	Wade	Male	United States
35	35	Reyna	Preston	Male	Sweden
36	36	Marge	Sadie	Female	France

Action Output:

Time	Action	Response	Duration / Fetch Time
20 16:46:52	DEALLOCATE PREPARE stmt	OK	0.000 sec
20 16:46:52	SELECT * FROM LIBSQL.author LIMIT 0, 1000	0 rows(s) returned	0.00000 sec / 0.000...

Query completed

select * from LibSQL.author;

13.

The screenshot shows the Oracle SQL Developer interface with the following details:

- Schemas:** Local instance 3206, Schemas: LibSQL
- Table:** payment_method
- Query:** SELECT * FROM LIBSQL.payment_method;
- Result Grid:** Shows the following data:

ID	Name
1	Debit
2	Credit
3	PayPal
4	Other
5	Membership

- Action Output:** Shows the execution history:

Time	Action	Response	Duration / Fetch Time
27 16:47:30	DEALLOCATE PREPARE stmt	OK	0.000 sec
28 16:47:35	SELECT * FROM LIBSQL.payment_method LIMIT 0, 1000	5 row(s) returned	0.00001 sec / 0.0000...

select * from LibSQL.payment_method;

14.

The screenshot shows the Oracle SQL Developer interface with the following details:

- Schemas:** Local instance 3206, Schemas: LibSQL
- Table:** plan
- Query:** SELECT * FROM LIBSQL.plan;
- Result Grid:** Shows the following data:

planid	name	type	price
PRONOD1	Monthly	Money	19.99
PRONOD2	Annual	Money	199.99
PRONOD3	Annual	Money	399.99
PRONOD4	Student	Monthly	14.99
PRONOD5	Special	Annual	149.99

- Action Output:** Shows the execution history:

Time	Action	Response	Duration / Fetch Time
24 16:48:13	DEALLOCATE PREPARE stmt	OK	0.000 sec
25 16:48:16	SELECT * FROM LIBSQL.plan	6 row(s) returned	0.000078 sec / 0.0000...

select * from LibSQL.plan;

15.

The screenshot shows the Oracle SQL Developer interface. The left sidebar displays the schema structure for 'LibSQL'. The main area shows the results of the following query:

```
SELECT * FROM LibSQL.publisher;
```

The results grid displays 22 rows of data from the 'publisher' table, including columns: id, name, state, country, and date_established. The 'Action Output' pane at the bottom shows two actions: 'DEALLOCATE PREPARE' and 'SELECT * FROM LibSQL.publisher LIMIT 0, 1000'.

`select * from LibSQL.publisher;`

13.

The screenshot shows the Oracle SQL Developer interface. The left sidebar displays the schema structure for 'LibSQL'. The main area shows the results of the following query:

```
SELECT * FROM LibSQL.genre;
```

The results grid displays 15 rows of data from the 'genre' table, including columns: id and genre. The 'Action Output' pane at the bottom shows two actions: 'DEALLOCATE PREPARE' and 'SELECT * FROM LibSQL.genre LIMIT 0, 1000'.

`select * from LibSQL.genre;`

14.

```
select * from LibSQL.user;
```

15.

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** Local instance 3306
- Tables:** checkout_cart
- Columns:** ord_no, ord_date, receive_date, user, payment
- Data:** The table contains approximately 100 rows of data, including columns like ord_no, ord_date, receive_date, user, and payment.
- Actions:** The bottom section shows the "checkout_cart1" action output, which includes a timeline of events such as "ALLOCATE PREPARE stmt" and "SELECT ...".

```
select * from LibSQL.checkout cart;
```

16.

The screenshot shows the Oracle SQL Developer interface with the following details:

- Schemas:** Local Instance 3306, Schemas: LibSQL
- Table:** books
- Query:** SELECT * FROM LibSQL.books;
- Result Grid:** Shows the results of the query, listing 800 rows. The columns include: id, title, author, genre, page, format, publication_date, publisher, language, and price.
- Actions:** Includes options like Refresh, Copy, Paste, and Print.
- Toolbar:** Contains icons for various database operations like Insert, Update, Delete, and Export.
- Help:** A context help message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

select * from LibSQL.books;

17.

The screenshot shows the Oracle SQL Developer interface with the following details:

- Schemas:** Local Instance 3306, Schemas: LibSQL, SQLPlus
- Table:** SQLPlus
- Query:** SELECT * FROM LibSQL.SQLPlus;
- Result Grid:** Shows the results of the query, listing 800 rows. The columns include: memberid, username, sub_date, plan, and preferredPay.
- Actions:** Includes options like Refresh, Copy, Paste, and Print.
- Toolbar:** Contains icons for various database operations like Insert, Update, Delete, and Export.
- Help:** A context help message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

SELECT * FROM LibSQL.SQLPlus;

18.

The screenshot shows the SSMS interface with the following details:

- Object Explorer:** Shows the database structure with objects like Schemas, Tables, Views, and Procedures.
- Query Editor:** Contains the following SQL query:

```
SELECT * FROM LiBSQL.transaction;
```
- Results Grid:** Displays the results of the query, showing multiple rows of data with columns: id, ord_no, ord_qty, type, and date.
- Transaction History:** A pane on the right shows a list of transactions with their status (e.g., Open, Pending, Closed), ID, and date.
- Help:** A context help window is open, providing information about automatic context help.

```
SELECT * FROM LibSQL.transaction;
```

