**SQL Training**

### Attention

1. The <XXXX> used in this article represents the employee ID. Please replace it with your own employee ID.

### Create data object

#### Create tables and table indexes

Table ：CUX\_OM\_CUSTOMERS\_XXXX

For storing customer information。

| Field | Type | Nullable | Default Value | Description |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| CUSTOMER\_ID | BIGINT | N |  |  |
| CUSTOMER\_NUMBER | VARCHAR(30) | N |  |  |
| CUSTOMER\_NAME | VARCHAR(100) | N |  |  |
| TELEPHONE | VARCAHR(50) | Y |  |  |
| START\_DATE\_ACTIVE | DATE | Y |  |  |
| END\_DATE\_ACTIVE | DATE | Y |  |  |
| CREATED\_BY | BIGINT | N |  |  |
| CREATION\_DATE | DATE | N |  |  |
| LAST\_UPDATED\_BY | BIGINT | N |  |  |
| LAST\_UPDATE\_DATE | DATE | N |  |  |
| LAST\_UPDATE\_LOGIN | BIGINT | Y |  |  |

Create indexes：

| Index | Unique | Field | Description |
| --- | --- | --- | --- |
|  |  |  |  |
| CUX\_OM\_CUSTOMERS\_XXXX\_U1 | Y | CUSTOMER\_ID |  |
| CUX\_OM\_CUSTOMERS\_XXXX\_U2 | Y | CUSTOMER\_NUMBER |  |
| CUX\_OM\_CUSTOMERS\_XXXX\_U3 | Y | CUSTOMER\_NAME |  |

Table：CUX\_OM\_ITEMS\_XXXX

For storing product information。

| Field | Type | Nullable | Default Value | Description |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| ITEM\_ID | BIGINT | N |  |  |
| ITEM\_NUMBER | VARCHAR(30) | N |  |  |
| ITEM\_NAME | VARCHAR(100) | N |  |  |
| UOM\_CODE | VARCHAR(25) | Y |  |  |
| START\_DATE\_ACTIVE | DATE | Y |  |  |
| END\_DATE\_ACTIVE | DATE | Y |  |  |
| CREATED\_BY | BIGINT | N |  |  |
| CREATION\_DATE | DATE | N |  |  |
| LAST\_UPDATED\_BY | BIGINT | N |  |  |
| LAST\_UPDATE\_DATE | DATE | N |  |  |
| LAST\_UPDATE\_LOGIN | BIGINT | Y |  |  |

Create indexes：

| Index | Unique | Field | Description |
| --- | --- | --- | --- |
|  |  |  |  |
| CUX\_OM\_ITEMS\_XXXX\_U1 | Y | ITEM\_ID |  |
| CUX\_OM\_ITEMS\_XXXX\_U2 | Y | ITEM\_NUMBER |  |

table：CUX\_OM\_HEADERS\_XXXX

For storing sales order header information。

| Field | Type | Nullable | DefaultValue | Description |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| HEADER\_ID | BIGINT | N |  |  |
| ORG\_ID | BIGINT | Y | 101 |  |
| ORDER\_NUMBER | VARCHAR(30) | N |  |  |
| CUSTOMER\_ID | BIGINT | Y |  |  |
| ORDER\_DATE | DATE | N |  |  |
| ORDER\_STATUS | VARCHAR(30) | Y |  | status list:  UNAPPROVED  APPROVED  CANCELLED  CLOSED |
| DESCRIPTION | VARCHAR(240) | Y |  |  |
| CREATED\_BY | BIGINT | N |  |  |
| CREATION\_DATE | DATE | N |  |  |
| LAST\_UPDATED\_BY | BIGINT | N |  |  |
| LAST\_UPDATE\_DATE | DATE | N |  |  |
| LAST\_UPDATE\_LOGIN | BIGINT | Y |  |  |
| ATTRIBUTE\_CATEGORY | VARCHAR(30) | Y |  |  |
| ATTRIBUTE1 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE2 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE3 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE4 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE5 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE6 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE7 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE8 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE9 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE10 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE11 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE12 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE13 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE14 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE15 | VARCHAR(150) | Y |  |  |

Create Indexes：

| Index | Unique | Field | Description |
| --- | --- | --- | --- |
|  |  |  |  |
| CUX\_OM\_HEADERS\_XXXX \_U1 | Y | HEADER\_ID |  |
| CUX\_OM\_HEADERS\_XXXX \_U2 | Y | ORDER\_NUMBER |  |
| CUX\_OM\_HEADERS\_XXXX \_N1 |  | CUSTOMER\_ID |  |

Table：CUX\_OM\_LINES\_XXXX

For storing sales order line information。

| Field | Type | Nullable | Default Value | Description |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| LINE\_ID | BIGINT | N |  |  |
| HEADER\_ID | BIGINT | N |  |  |
| LINE\_NUMBER | VARCHAR(30) | N |  |  |
| ITEM\_ID | BIGINT | N |  |  |
| UNIT\_PRICE | DECIMAL(10,2) | Y |  |  |
| QUANTITY | DECIMAL(10,2) | Y |  |  |
| DESCRIPTION | VARCHAR(240) | Y |  |  |
| ADDITION1 | VARCHAR(150) | Y |  |  |
| ADDITION2 | VARCHAR(150) | Y |  |  |
| ADDITION3 | VARCHAR(150) | Y |  |  |
| ADDITION4 | VARCHAR(150) | Y |  |  |
| ADDITION5 | VARCHAR(150) | Y |  |  |
| CREATED\_BY | BIGINT | N |  |  |
| CREATION\_DATE | DATE | N |  |  |
| LAST\_UPDATED\_BY | BIGINT | N |  |  |
| LAST\_UPDATE\_DATE | DATE | N |  |  |
| LAST\_UPDATE\_LOGIN | BIGINT | Y |  |  |
| ATTRIBUTE\_CATEGORY | VARCHAR(30) | Y |  |  |
| ATTRIBUTE1 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE2 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE3 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE4 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE5 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE6 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE7 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE8 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE9 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE10 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE11 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE12 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE13 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE14 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE15 | VARCHAR(150) | Y |  |  |

Create Indexes：

| Index | Unique | Field | Description |
| --- | --- | --- | --- |
|  |  |  |  |
| CUX\_OM\_LINES\_XXXX \_U1 | Y | LINE\_ID |  |
| CUX\_OM\_LINES\_XXXX \_N1 |  | HEADER\_ID |  |
| CUX\_OM\_LINES\_XXXX \_N2 |  | ITEM\_ID |  |

#### Import data

excel：《1 – Table Data.xls》

1．CUX\_OM\_CUSTOMERS\_XXXX

2．CUX\_OM\_ITEMS\_XXXX

4．CUX\_OM\_HEADERS\_XXXX

5．CUX\_OM\_LINES\_XXXX

### Questions

#### NO.01

Please create the above objects in the database: table, table index。

-- The name of the database I use --

USE tutorial2manual;

-- To create CUX\_OM\_CUSTOMERS\_46322 table --

CREATE TABLE CUX\_OM\_CUSTOMERS\_46322(CUSTOMER\_ID bigint NOT NULL,

CUSTOMER\_NUMBER varchar(30) NOT NULL,

CUSTOMER\_NAME varchar(100) NOT NULL,

TELEPHONE varchar(50),

START\_DATE\_ACTIVE date,

END\_DATE\_ACTIVE date,

CREATED\_BY bigint NOT NULL,

CREATION\_DATE date NOT NULL,

LAST\_UPDATED\_BY bigint NOT NULL,

LAST\_UPDATE\_DATE date NOT NULL,

LAST\_UPDATE bigint);

-- To check whether the table is available or not --

SHOW tables;

-- To create indexes on CUX\_OM\_CUSTOMERS\_46322 table\*

CREATE UNIQUE INDEX CUX\_OM\_CUSTOMERS\_46322\_U1 ON CUX\_OM\_CUSTOMERS\_46322(CUSTOMER\_ID);

CREATE UNIQUE INDEX CUX\_OM\_CUSTOMERS\_46322\_U2 ON CUX\_OM\_CUSTOMERS\_46322(CUSTOMER\_NUMBER);

CREATE UNIQUE INDEX CUX\_OM\_CUSTOMERS\_46322\_U3 ON CUX\_OM\_CUSTOMERS\_46322(CUSTOMER\_NAME);

-- To add primary key besides input it when creating a table --

ALTER TABLE CUX\_OM\_CUSTOMERS\_46322 ADD PRIMARY KEY (CUSTOMER\_ID);

-- To create another table named as CUX\_OM\_LINES\_46322 --

CREATE TABLE CUX\_OM\_LINES\_46322(LINE\_ID bigint NOT NULL,

HEADER\_ID bigint NOT NULL,

LINE\_NUMBER varchar(30) NOT NULL,

ITEM\_ID bigint NOT NULL,

UNIT\_PRICE decimal(10,2),

QUANTITY decimal(10,2),

DESCRIPTION varchar(240),

ADDITION1 varchar(150),

ADDITION2 varchar(150),

ADDITION3 varchar(150),

ADDITION4 varchar(150),

ADDITION5 varchar(150),

CREATED\_BY bigint NOT NULL,

CREATION\_DATE date NOT NULL,

LAST\_UPDATED\_BY bigint NOT NULL,

LAST\_UPDATE\_DATE date NOT NULL,

LAST\_UPDATE\_LOGIN bigint,

ATTRIBUTE\_CATEGORY varchar(30),

ATTRIBUTE1 varchar(150),

ATTRIBUTE2 varchar(150),

ATTRIBUTE3 varchar(150),

ATTRIBUTE4 varchar(150),

ATTRIBUTE5 varchar(150),

ATTRIBUTE6 varchar(150),

ATTRIBUTE7 varchar(150),

ATTRIBUTE8 varchar(150),

ATTRIBUTE9 varchar(150),

ATTRIBUTE10 varchar(150),

ATTRIBUTE11 varchar(150),

ATTRIBUTE12 varchar(150),

ATTRIBUTE13 varchar(150),

ATTRIBUTE14 varchar(150),

ATTRIBUTE15 varchar(150),

PRIMARY KEY(HEADER\_ID)

);

CREATE UNIQUE INDEX CUX\_OM\_LINES\_46322\_U1 ON CUX\_OM\_LINES\_46322(LINE\_ID);

CREATE INDEX CUX\_OM\_LINES\_46322\_N1 ON CUX\_OM\_LINES\_46322(HEADER\_ID);

CREATE INDEX CUX\_OM\_LINES\_46322\_N2 ON CUX\_OM\_LINES\_46322(ITEM\_ID);

SHOW tables;

-- To create another table named as CUX\_OM\_ITEMS\_46322 --

CREATE TABLE CUX\_OM\_ITEMS\_46322(ITEM\_ID bigint NOT NULL,

ITEM\_NUMBER varchar(30) NOT NULL,

ITEM\_NAME varchar(100) NOT NULL,

UOM\_CODE varchar(25),

START\_DATE\_ACTIVE date,

END\_DATE\_ACTIVE date,

CREATED\_BY bigint NOT NULL,

CREATION\_DATE date NOT NULL,

LAST\_UPDATE\_BY bigint NOT NULL,

LAST\_UPDATE\_DATE date NOT NULL,

LAST\_UPDATE\_LOGIN bigint);

CREATE UNIQUE INDEX CUX\_OM\_ITEMS\_46322\_U1 ON CUX\_OM\_ITEMS\_46322(ITEM\_ID);

CREATE UNIQUE INDEX CUX\_OM\_ITEMS\_46322\_U2 ON CUX\_OM\_ITEMS\_46322(ITEM\_NUMBER);

ALTER TABLE CUX\_OM\_ITEMS\_46322 ADD PRIMARY KEY (ITEM\_ID);

-- To create another table named as CUX\_OM\_ITEMS\_46322 --

CREATE TABLE CUX\_OM\_HEADERS\_46322(HEADER\_ID bigint NOT NULL,

ORG\_ID bigint,

ORDER\_NUMBER varchar(30) NOT NULL,

CUSTOMER\_ID bigint,

ORDER\_DATE date NOT NULL,

ORDER\_STATUS varchar(30),

DESCRIPTION varchar(240),

CREATED\_BY bigint NOT NULL,

CREATION\_DATE date NOT NULL,

LAST\_UPDATED\_BY bigint NOT NULL,

LAST\_UPDATE\_DATE date NOT NULL,

LAST\_UPDATE\_LOGIN bigint,

ATTRIBUTE\_CATEGORY varchar(30),

ATTRIBUTE1 varchar(150),

ATTRIBUTE2 varchar(150),

ATTRIBUTE3 varchar(150),

ATTRIBUTE4 varchar(150),

ATTRIBUTE5 varchar(150),

ATTRIBUTE6 varchar(150),

ATTRIBUTE7 varchar(150),

ATTRIBUTE8 varchar(150),

ATTRIBUTE9 varchar(150),

ATTRIBUTE10 varchar(150),

ATTRIBUTE11 varchar(150),

ATTRIBUTE12 varchar(150),

ATTRIBUTE13 varchar(150),

ATTRIBUTE14 varchar(150),

ATTRIBUTE15 varchar(150));

ALTER TABLE CUX\_OM\_HEADERS\_46322 ADD PRIMARY KEY (HEADER\_ID);

CREATE UNIQUE INDEX CUX\_OM\_HEADERS\_46322\_U1 ON CUX\_OM\_HEADERS\_46322(HEADER\_ID);

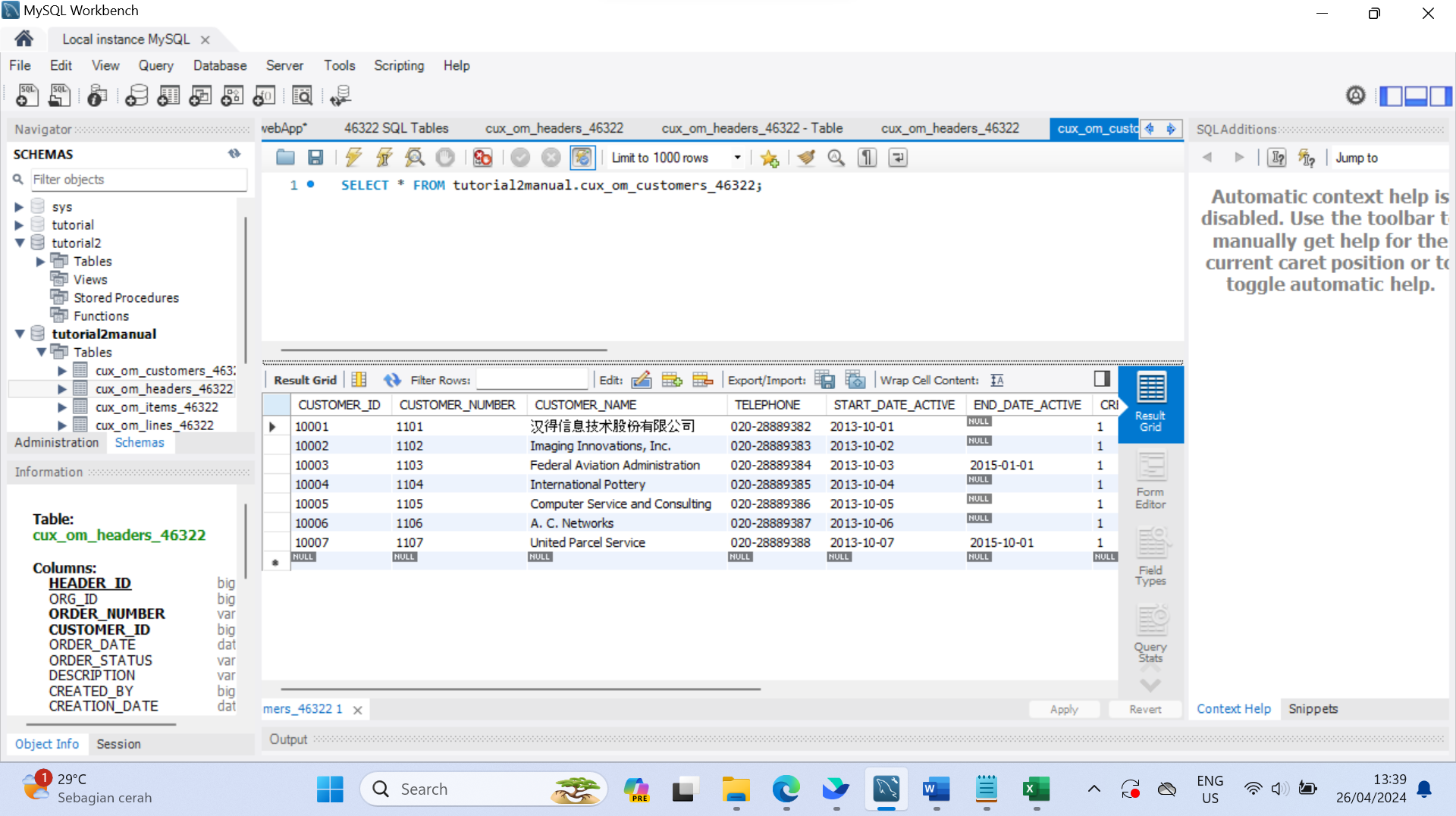
CREATE UNIQUE INDEX CUX\_OM\_HEADERS\_46322\_U2 ON CUX\_OM\_HEADERS\_46322(ORDER\_NUMBER);

CREATE INDEX CUX\_OM\_HEADERS\_46322\_N1 ON CUX\_OM\_HEADERS\_46322(CUSTOMER\_ID);

#### NO.02

Please import the corresponding table data in the file: "1 – Table Data.xlsx" into the table。

**Customers**



**Headers**

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**Items**

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**Lines**

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#### NO.03

Create a view：CUX\_OM\_HEADERS\_V

* view：CUX\_OM\_HEADERS\_V

| Field | Type | Nullable | DefaultValue | Description |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| HEADER\_ID | BIGINT | N |  |  |
| ORDER\_NUMBER | VARCHAR(30) | N |  |  |
| CUSTOMER\_ID | BIGINT | Y |  |  |
| ORDER\_DATE | DATE | N |  |  |
| ORDER\_STATUS | VARCHAR(30) | Y |  | status list:  UNAPPROVED  APPROVED  CANCELLED  CLOSED |
| DESCRIPTION | VARCHAR(240) | Y |  |  |
| CREATED\_BY | BIGINT | N |  |  |
| CREATION\_DATE | DATE | N |  |  |
| LAST\_UPDATED\_BY | BIGINT | N |  |  |
| LAST\_UPDATE\_DATE | DATE | N |  |  |
| LAST\_UPDATE\_LOGIN | BIGINT | Y |  |  |
| ATTRIBUTE\_CATEGORY | VARCHAR(30) | Y |  |  |
| ATTRIBUTE1 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE2 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE3 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE4 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE5 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE6 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE7 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE8 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE9 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE10 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE11 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE12 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE13 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE14 | VARCHAR(150) | Y |  |  |
| ATTRIBUTE15 | VARCHAR(150) | Y |  |  |
| CUSTOMER\_NUMBER | VARCHAR(30) |  |  |  |
| CUSTOMER\_NAME | VARCHAR(100) |  |  |  |
| TELEPHONE | VARCHAR(50) | Y |  |  |

CREATE VIEW CUX\_OM\_HEADERS\_V AS SELECT CUX\_OM\_HEADERS\_46322.HEADER\_ID, CUX\_OM\_HEADERS\_46322.ORDER\_NUMBER, CUX\_OM\_HEADERS\_46322.CUSTOMER\_ID, CUX\_OM\_HEADERS\_46322.ORDER\_DATE,

CUX\_OM\_HEADERS\_46322.ORDER\_STATUS, CUX\_OM\_HEADERS\_46322.DESCRIPTION, CUX\_OM\_HEADERS\_46322.CREATED\_BY, CUX\_OM\_HEADERS\_46322.CREATION\_DATE, CUX\_OM\_HEADERS\_46322.LAST\_UPDATED\_BY,

CUX\_OM\_HEADERS\_46322.LAST\_UPDATE\_DATE, CUX\_OM\_HEADERS\_46322.LAST\_UPDATE\_LOGIN,

CUX\_OM\_HEADERS\_46322.ATTRIBUTE\_CATEGORY, CUX\_OM\_HEADERS\_46322.ATTRIBUTE1,

CUX\_OM\_HEADERS\_46322.ATTRIBUTE2, CUX\_OM\_HEADERS\_46322.ATTRIBUTE3, CUX\_OM\_HEADERS\_46322.ATTRIBUTE4, CUX\_OM\_HEADERS\_46322.ATTRIBUTE5, CUX\_OM\_HEADERS\_46322.ATTRIBUTE6,

CUX\_OM\_HEADERS\_46322.ATTRIBUTE7, CUX\_OM\_HEADERS\_46322.ATTRIBUTE8, CUX\_OM\_HEADERS\_46322.ATTRIBUTE9, CUX\_OM\_HEADERS\_46322.ATTRIBUTE10, CUX\_OM\_HEADERS\_46322.ATTRIBUTE11, CUX\_OM\_HEADERS\_46322.ATTRIBUTE12,

CUX\_OM\_HEADERS\_46322.ATTRIBUTE13, CUX\_OM\_HEADERS\_46322.ATTRIBUTE14, CUX\_OM\_HEADERS\_46322.ATTRIBUTE15, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NAME, CUX\_OM\_CUSTOMERS\_46322.TELEPHONE

FROM CUX\_OM\_HEADERS\_46322

LEFT JOIN CUX\_OM\_CUSTOMERS\_46322 ON CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_ID = CUX\_OM\_HEADERS\_46322.CUSTOMER\_ID;

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#### NO.04

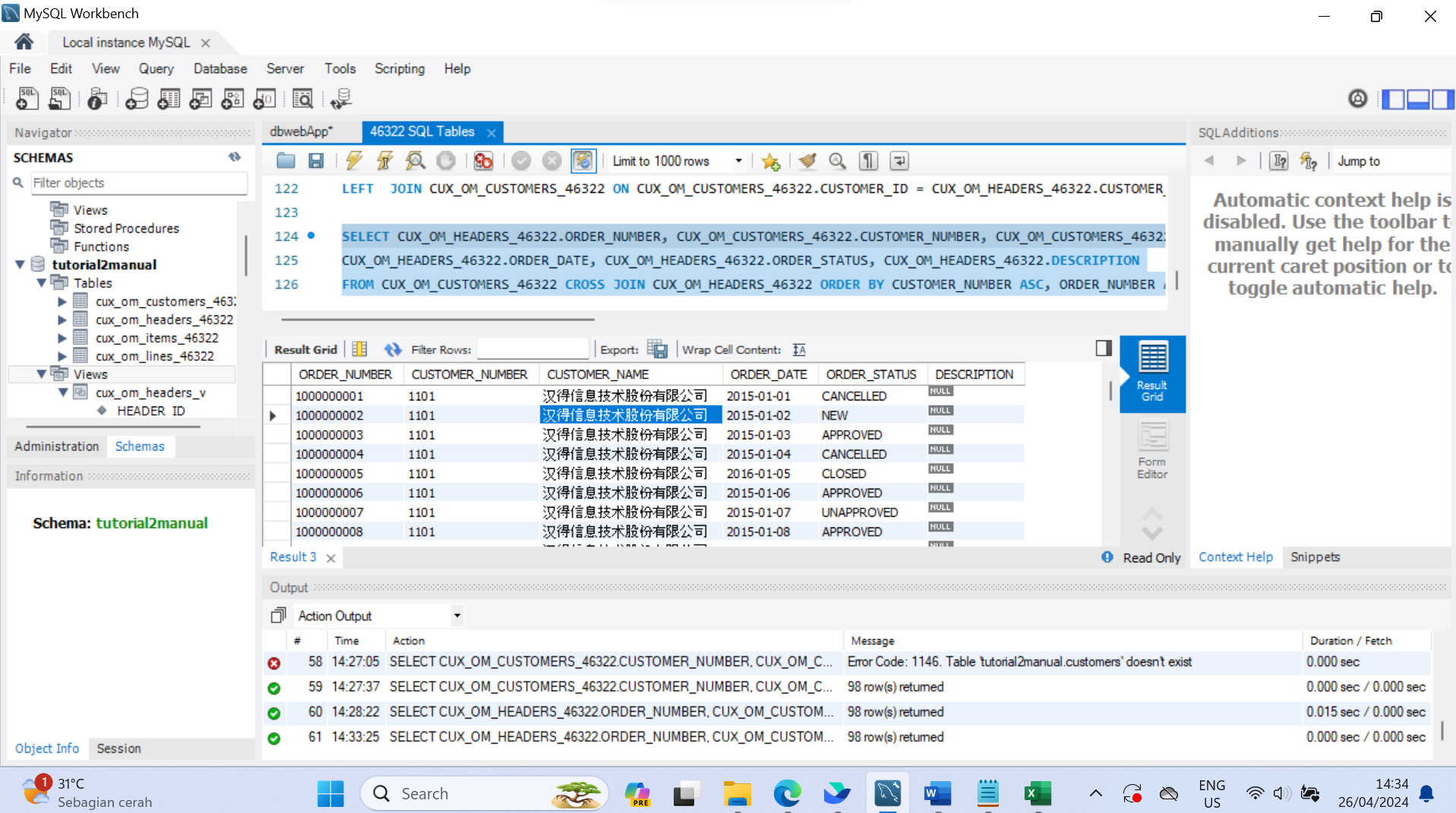
Write SQL to display the following information and sort it by customer\_number and order\_number in ascending order。

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| order\_number | customer\_number | customer\_name | order\_date | order\_status | description |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

SELECT CUX\_OM\_HEADERS\_46322.ORDER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NAME,

CUX\_OM\_HEADERS\_46322.ORDER\_DATE, CUX\_OM\_HEADERS\_46322.ORDER\_STATUS, CUX\_OM\_HEADERS\_46322.DESCRIPTION

FROM CUX\_OM\_CUSTOMERS\_46322 CROSS JOIN CUX\_OM\_HEADERS\_46322 ORDER BY CUSTOMER\_NUMBER ASC, ORDER\_NUMBER ASC;



#### NO.05

Write SQL to display order and order line information, sorted by order number and line number in ascending order (including orders with all statuses)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| order\_number | customer\_name | order\_date | order\_status | line\_number | item\_number | item\_name |
|  |  |  |  |  |  |  |

#### SELECT CUX\_OM\_HEADERS\_46322.ORDER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NAME,

#### CUX\_OM\_HEADERS\_46322.ORDER\_DATE, CUX\_OM\_HEADERS\_46322.ORDER\_STATUS, CUX\_OM\_LINES\_46322.LINE\_NUMBER, CUX\_OM\_ITEMS\_46322.ITEM\_NUMBER,

#### CUX\_OM\_ITEMS\_46322.ITEM\_NAME FROM CUX\_OM\_CUSTOMERS\_46322 CROSS JOIN CUX\_OM\_HEADERS\_46322, CUX\_OM\_LINES\_46322,

#### CUX\_OM\_ITEMS\_46322 ORDER BY CUX\_OM\_HEADERS\_46322.ORDER\_NUMBER ASC, CUX\_OM\_LINES\_46322.LINE\_NUMBER ASC; A screenshot of a computer Description automatically generated

#### NO.06

Write SQL to display products purchased by customers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| customer\_number | customer\_number | item\_number | item\_name | uom\_code |
| 1101 | 汉得信息技术股份有限公司 | SB86662 | 办公用品 | 个 |

#### SELECT CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NAME, CUX\_OM\_ITEMS\_46322.ITEM\_NUMBER, CUX\_OM\_ITEMS\_46322.ITEM\_NAME, CUX\_OM\_ITEMS\_46322.UOM\_CODE

#### FROM CUX\_OM\_CUSTOMERS\_46322 CROSS JOIN CUX\_OM\_ITEMS\_46322 WHERE CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NUMBER = '1101'AND CUX\_OM\_ITEMS\_46322.ITEM\_NUMBER = 'SB86662'; A screenshot of a computer Description automatically generated

#### NO.07

Write SQL to count all orders (excluding canceled orders) and calculate the average sales unit price and the highest and lowest unit price by product.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| item\_number | item\_name | average\_unit\_price | highest\_unit\_price | lowest\_unit\_price |
|  |  |  |  |  |

SELECT CUX\_OM\_ITEMS\_46322.ITEM\_NUMBER, CUX\_OM\_ITEMS\_46322.ITEM\_NAME, AVG(CUX\_OM\_LINES\_46322.UNIT\_PRICE),

MAX(CUX\_OM\_LINES\_46322.UNIT\_PRICE), MIN(CUX\_OM\_LINES\_46322.UNIT\_PRICE)

FROM CUX\_OM\_ITEMS\_46322

INNER JOIN CUX\_OM\_LINES\_46322 ON CUX\_OM\_ITEMS\_46322.ITEM\_ID = CUX\_OM\_LINES\_46322.ITEM\_ID

INNER JOIN CUX\_OM\_HEADERS\_46322 ON CUX\_OM\_LINES\_46322.HEADER\_ID = CUX\_OM\_HEADERS\_46322.HEADER\_ID

WHERE CUX\_OM\_HEADERS\_46322.ORDER\_STATUS != 'CANCELLED'

GROUP BY CUX\_OM\_ITEMS\_46322.ITEM\_NUMBER, CUX\_OM\_ITEMS\_46322.ITEM\_NAME;

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#### NO.08

Write SQL to query customer information about canceled orders.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| customer\_number | customer\_name | telephone | start\_date\_active | end\_date\_active |
|  |  |  |  |  |

#### SELECT CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NUMBER, CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_NAME, CUX\_OM\_CUSTOMERS\_46322.TELEPHONE,

#### CUX\_OM\_CUSTOMERS\_46322.START\_DATE\_ACTIVE, CUX\_OM\_CUSTOMERS\_46322.END\_DATE\_ACTIVE

#### FROM CUX\_OM\_CUSTOMERS\_46322

#### LEFT JOIN CUX\_OM\_HEADERS\_46322 ON CUX\_OM\_HEADERS\_46322.CUSTOMER\_ID = CUX\_OM\_CUSTOMERS\_46322.CUSTOMER\_ID

#### WHERE CUX\_OM\_HEADERS\_46322.ORDER\_STATUS = 'CANCELLED'; A screenshot of a phone number Description automatically generated

#### NO.09

Write SQL to count the company's total sales in 2015. (All orders with status CANCELLED are excluded from statistics)

|  |
| --- |
| Total Sales |
|  |

#### SELECT COUNT(CUX\_OM\_HEADERS\_46322.ORDER\_STATUS) AS 'Total Sales'

#### FROM CUX\_OM\_HEADERS\_46322

#### WHERE CUX\_OM\_HEADERS\_46322.ORDER\_STATUS != 'CANCELLED';

#### A screenshot of a computer Description automatically generated NO.10

Write a script to add an index to the table: CUX\_OM\_ITEMS\_XXXX: a normal index, and the applicable field: ITEM\_NAME.

CREATE UNIQUE INDEX CUX\_OM\_ITEMS\_46322\_U3 ON CUX\_OM\_ITEMS\_46322(ITEM\_NAME);

ALTER TABLE CUX\_OM\_ITEMS\_46322 DROP INDEX CUX\_OM\_ITEMS\_46322\_U3;

CREATE INDEX CUX\_OM\_ITEMS\_46322\_U3 ON CUX\_OM\_ITEMS\_46322(ITEM\_NAME);