SQL1-DDL
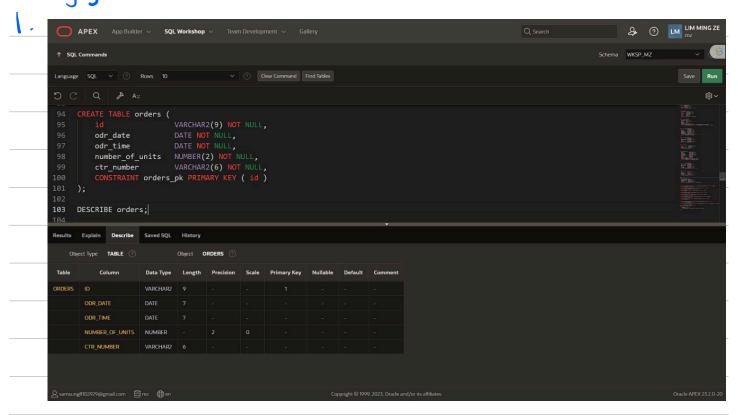## Part 1

1. 10 tables have been created using CREATE TABLE statement.

2. 6 columns are created for price history table

3. NOT NULL statement

4. customer_address_customer_fk

5. Lowest value is -99 and highest value is 99.

6. Lowest value is -99999.99 and highest value is 99999.99.
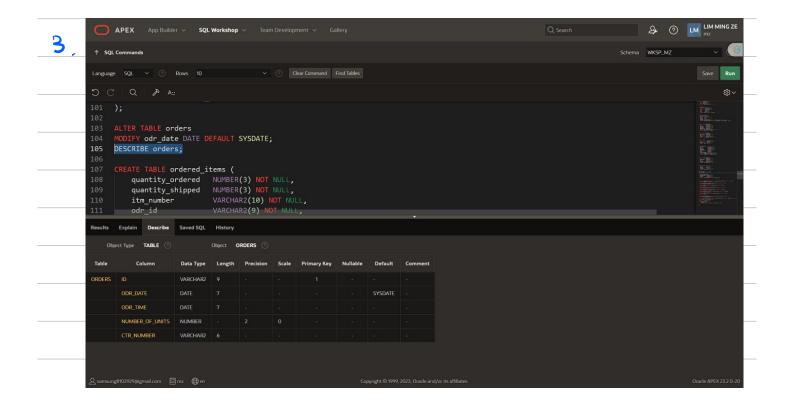
7. itm_number, start_date and start_time.
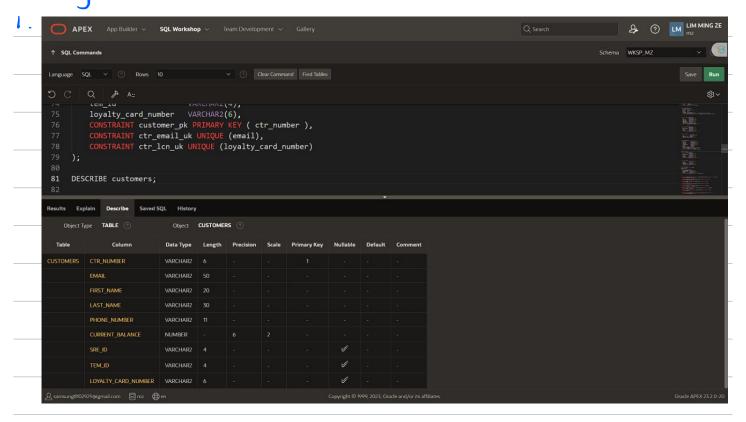
Part 2

Modifying a column

1.

2. ALTER TABLE orders
   MODIFY odr_date DATE DEFAULT SYSDATE;

3.

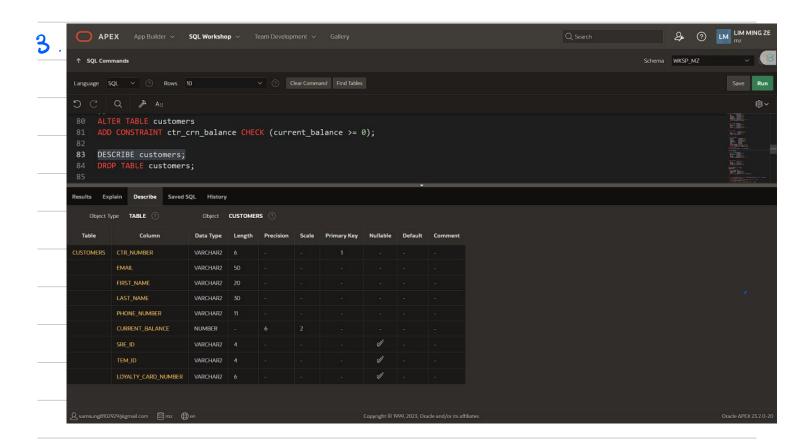# Adding a check constraint

1.

2. ALTER TABLE customers
   ADD CONSTRAINT ctr_crn_balance CHECK (current_balance >= 0);

3.

4.

↑ Object Browser   Schema WKSP_MZ ⌄ ⑦

⊞ CUSTOMERS

Columns Data Indexes **Constraints** Grants Statistics Triggers Dependencies DDL Sample Queries

+ Create   🗑 Drop   ◉ Enable   ⊘ Disable   ⟳ Refresh

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change
CTR_CRN_BALANCE	Check	current_balance >= 0				ENABLED	11/09/2023
SYS_C00149234641	Check	"CTR_NUMBER" IS NOT NULL				ENABLED	11/09/2023
SYS_C00149234642	Check	"EMAIL" IS NOT NULL				ENABLED	11/09/2023
SYS_C00149234643	Check	"FIRST_NAME" IS NOT NULL				ENABLED	11/09/2023
SYS_C00149234644	Check	"LAST_NAME" IS NOT NULL				ENABLED	11/09/2023
SYS_C00149234645	Check	"PHONE_NUMBER" IS NOT NULL				ENABLED	11/09/2023
SYS_C00149234646	Check	"CURRENT_BALANCE" IS NOT NULL				ENABLED	11/09/2023
CUSTOMER_PK	Primary			CTR_NUMBER		ENABLED	11/09/2023
CTR_EMAIL_UK	Unique			EMAIL		ENABLED	11/09/2023
CTR_LCN_UK	Unique			LOYALTY_CARD_NUMBER		ENABLED	11/09/2023

1 cells selected   1 - 10 of 10

Adding a column

1.

↑ SQL Commands   Schema WKSP_MZ ⌄

Language SQL ⌄ ⑦   Rows 10 ⌄ ⑦   Clear Command   Find Tables   Save   Run

↺ ↻ 🔍 🔧 A∴   ⚙ ⌄

```
80   ALTER TABLE customers
81   ADD CONSTRAINT ctr_crn_balance CHECK (current_balance >= 0);
82
83   DESCRIBE customers;
84   DROP TABLE customers;
85
```

Results Explain **Describe** Saved SQL History

Object Type **TABLE** ⑦   Object **CUSTOMERS** ⑦

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMERS	CTR_NUMBER	VARCHAR2	6	-	-	1	-	-	-
	EMAIL	VARCHAR2	50	-	-	-	-	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	-	-	-
	LAST_NAME	VARCHAR2	30	-	-	-	-	-	-
	PHONE_NUMBER	VARCHAR2	11	-	-	-	-	-	-
	CURRENT_BALANCE	NUMBER	-	6	2	-	-	-	-
	SRE_ID	VARCHAR2	4	-	-	-	✓	-	-
	TEM_ID	VARCHAR2	4	-	-	-	✓	-	-
	LOYALTY_CARD_NUMBER	VARCHAR2	6	-	-	-	✓	-	-

2. ALTER TABLE customers
   ADD mobile_phone_number VARCHAR2(11);

3.

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↑ SQL Commands

Schema WKSP_MZ

Language SQL Rows 10 Clear Command Find Tables Save Run

```
81   ALTER TABLE customers
82   ADD CONSTRAINT check_balance_non_negative CHECK (current_balance >= 0);
83
84   ALTER TABLE customers
85   ADD  mobile_phone_number VARCHAR2(11);
86   DESCRIBE customers;
87
88
```

Results | Explain | **Describe** | Saved SQL | History

Object Type **TABLE**   Object **CUSTOMERS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMERS	CTR_NUMBER	VARCHAR2	6	-	-	1	-	-	-
	EMAIL	VARCHAR2	50	-	-	-	-	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	-	-	-
	LAST_NAME	VARCHAR2	30	-	-	-	-	-	-
	PHONE_NUMBER	VARCHAR2	11	-	-	-	-	-	-
	CURRENT_BALANCE	NUMBER	-	6	2	-	-	-	-
	SRE_ID	VARCHAR2	4	-	-	-	✓	-	-
	TEM_ID	VARCHAR2	4	-	-	-	✓	-	-
	LOYALTY_CARD_NUMBER	VARCHAR2	6	-	-	-	✓	-	-
	MOBILE_PHONE_NUMBER	VARCHAR2	11	-	-	-	✓	-	-

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Dropping a column

1.

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↑ SQL Commands

Schema WKSP_MZ

Language SQL Rows 10 Clear Command Find Tables Save Run

```
81   ALTER TABLE customers
82   ADD CONSTRAINT check_balance_non_negative CHECK (current_balance >= 0);
83
84   ALTER TABLE customers
85   ADD  mobile_phone_number VARCHAR2(11);
86   DESCRIBE customers;
87
88
```

Results | Explain | **Describe** | Saved SQL | History

Object Type **TABLE**   Object **CUSTOMERS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMERS	CTR_NUMBER	VARCHAR2	6	-	-	1	-	-	-
	EMAIL	VARCHAR2	50	-	-	-	-	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	-	-	-
	LAST_NAME	VARCHAR2	30	-	-	-	-	-	-
	PHONE_NUMBER	VARCHAR2	11	-	-	-	-	-	-
	CURRENT_BALANCE	NUMBER	-	6	2	-	-	-	-
	SRE_ID	VARCHAR2	4	-	-	-	✓	-	-
	TEM_ID	VARCHAR2	4	-	-	-	✓	-	-
	LOYALTY_CARD_NUMBER	VARCHAR2	6	-	-	-	✓	-	-
	MOBILE_PHONE_NUMBER	VARCHAR2	11	-	-	-	✓	-	-

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2. ALTER TABLE customers
DROP COLUMN mobile_phone_number;

3.