CHEAY SEONG MEN A22EC0041

Part 1

1. 10 tables
2. 6 column
3. NOT NULL
4. otr_ number
5. lowest = -99 , highest = 99
6. lowest = -99999.99, highest = 99999.99
7. primary key = itm_number, start_date, start_time

Part 2

Modify a column =

1. DESCRIBE orders;
2. ALTER TABLE orders MODIFY odr_date DATE DEFAULT SYSDATE;
3. DESCRIBE orders;

Adding a check constraint =

1. DESCRIBE customers;
2. ADD CONSTRAINT chk_balance_nonnegative
   CHECK (current_balance >= 0);
3. DESCRIBE customers;
4. SELECT constraint_name, constraint_type, search_condition
   FROM user_constraints
   WHERE table_name = 'CUSTOMERS';

Adding a column =

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

Dropping a column =

1. DESCRIBE customers;
2. ALTER TABLE customers DROP COLUMN mobile_phone_number;
3. DESCRIBE customers;

Good ideal

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Output for Part2:

Modify the column:

1. Output of DESCRIBE command before table is altered.

```
Name               Null?     Type
---------------    --------  -----------
ID                 NOT NULL  VARCHAR2(9)
ODR_DATE           NOT NULL  DATE
ODR_TIME           NOT NULL  DATE
NUMBER_OF_UNITS    NOT NULL  NUMBER(2)
CTR_NUMBER         NOT NULL  VARCHAR2(6)
```

3. Output of DESCRIBE command before table is altered.

```
Name               Null?     Type
---------------    --------  -----------
ID                 NOT NULL  VARCHAR2(9)
ODR_DATE           NOT NULL  DATE
ODR_TIME           NOT NULL  DATE
NUMBER_OF_UNITS    NOT NULL  NUMBER(2)
CTR_NUMBER         NOT NULL  VARCHAR2(6)
```

Adding a check constraint:

1. Output of DESCRIBE command before table is altered.

```
Name                   Null?     Type
--------------------   --------  ------------
CTR_NUMBER             NOT NULL  VARCHAR2(6)
EMAIL                  NOT NULL  VARCHAR2(50)
FIRST_NAME             NOT NULL  VARCHAR2(20)
LAST_NAME              NOT NULL  VARCHAR2(30)
PHONE_NUMBER           NOT NULL  VARCHAR2(11)
CURRENT_BALANCE        NOT NULL  NUMBER(6,2)
SRE_ID                           VARCHAR2(4)
TEM_ID                           VARCHAR2(4)
LOYALTY_CARD_NUMBER              VARCHAR2(6)
```

3. Output of DESCRIBE command after table is altered.

```
Name                   Null?     Type
--------------------   --------  ------------
CTR_NUMBER             NOT NULL  VARCHAR2(6)
EMAIL                  NOT NULL  VARCHAR2(50)
FIRST_NAME             NOT NULL  VARCHAR2(20)
LAST_NAME              NOT NULL  VARCHAR2(30)
PHONE_NUMBER           NOT NULL  VARCHAR2(11)
CURRENT_BALANCE        NOT NULL  NUMBER(6,2)
SRE_ID                           VARCHAR2(4)
TEM_ID                           VARCHAR2(4)
LOYALTY_CARD_NUMBER              VARCHAR2(6)
```
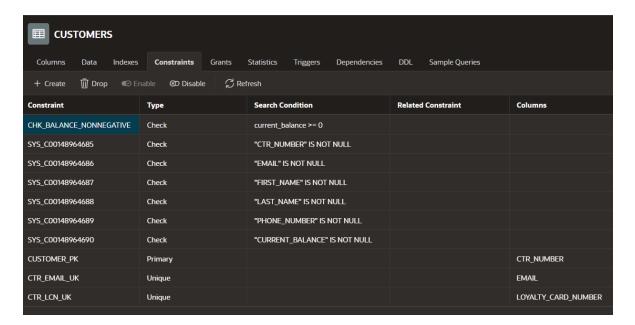
4. Display the constraint.

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION
1	CUSTOMER_SALES_REP_FK	R	(null)
2	CUSTOMER_TEAM_FK	R	(null)
3	SYS_C008308	C	"CTR_NUMBER" IS NOT NULL
4	SYS_C008309	C	"EMAIL" IS NOT NULL
5	SYS_C008310	C	"FIRST_NAME" IS NOT NULL
6	SYS_C008311	C	"LAST_NAME" IS NOT NULL
7	SYS_C008312	C	"PHONE_NUMBER" IS NOT NULL
8	SYS_C008313	C	"CURRENT_BALANCE" IS NOT NULL
9	CHK_BALANCE_NONNEGATIVE	C	current_balance >= 0
10	CUSTOMER_PK	P	(null)
11	CTR_EMAIL_UK	U	(null)
12	CTR_LCN_UK	U	(null)

(from SQL Developer)

CUSTOMERS

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

+ Create   Drop   Enable   Disable   Refresh

Constraint	Type	Search Condition	Related Constraint	Columns
CHK_BALANCE_NONNEGATIVE	Check	current_balance >= 0		
SYS_C00148964685	Check	"CTR_NUMBER" IS NOT NULL		
SYS_C00148964686	Check	"EMAIL" IS NOT NULL		
SYS_C00148964687	Check	"FIRST_NAME" IS NOT NULL		
SYS_C00148964688	Check	"LAST_NAME" IS NOT NULL		
SYS_C00148964689	Check	"PHONE_NUMBER" IS NOT NULL		
SYS_C00148964690	Check	"CURRENT_BALANCE" IS NOT NULL		
CUSTOMER_PK	Primary			CTR_NUMBER
CTR_EMAIL_UK	Unique			EMAIL
CTR_LCN_UK	Unique			LOYALTY_CARD_NUMBER

(from Object Browser of SQL workshop)

Adding a column:

1. Output of DESCRIBE command before table is altered.

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)

3. Output of DESCRIBE command after table is altered.

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)
MOBILE_PHONE_NUMBER	-	VARCHAR2(11)

Dropping a column:

1. Output of DESCRIBE command before table is altered.

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)
MOBILE_PHONE_NUMBER	-	VARCHAR2(11)

3. Output of DESCRIBE command after table is altered.

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)