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B23CS0067

DATABASE SECTION 03

1 NOV 2023
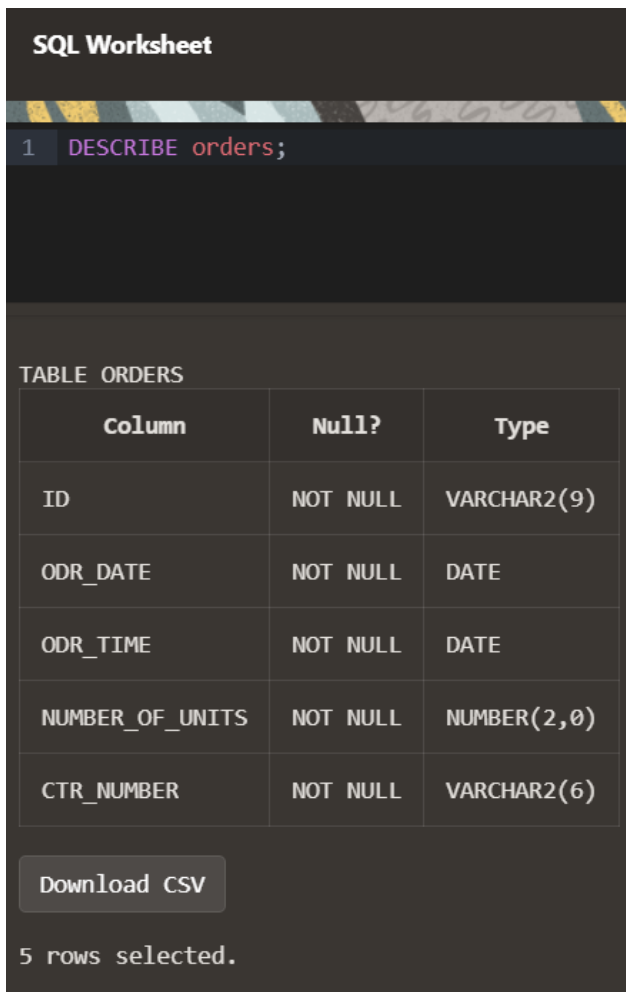
LAB 1 SQL1-DDL

PART 1

1. 10
2. 6
3. NOT NULL
4. ctr_number
5. lowest value : 0, highest value : 99
6. lowest value : 0.00, highest value : 9 999 999.99
7. itm_number, start_date, start_time

PART 2 – Modifying a column

1. Run DESCRIBE on orders table.

2. Add default contrains

```
SQL Worksheet

1 v  ALTER TABLE orders
2    MODIFY odr_date DEFAULT SYSDATE;



Table altered.
```

3. DESC orders

```
SQL Worksheet

1    DESCRIBE orders;
2
```

TABLE ORDERS

Column	Null?	Type
ID	NOT NULL	VARCHAR2(9)
ODR_DATE	NOT NULL	DATE
ODR_TIME	NOT NULL	DATE
NUMBER_OF_UNITS	NOT NULL	NUMBER(2,0)
CTR_NUMBER	NOT NULL	VARCHAR2(6)

Download CSV

5 rows selected.

PART 2 – Adding a check constrains

1. Run DESCRIBE on customers table

SQL Worksheet

```
1   DESCRIBE customers;
2
```

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)

2. Add default constrains

SQL Worksheet

```
1   ALTER TABLE customers
2   ADD CONSTRAINT check_balance_positive
3   CHECK (current_balance >= 0);
4
5
```

Table altered.

3. DESCRIBE customers

SQL Worksheet

```
1   DESCRIBE customers;
2
3
```

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)

4. Result of a describe command

CUSTOMERS

Show All   Columns   **Constraints**   Related Constraints   Triggers   Indexes   Code

Constraints

Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns
CHECK_BALANCE_POSITIVE	Check	current_balance >= 0	-	-	-
SYS_C00137065338	Check	"CTR_NUMBER" IS NOT NULL	-	-	-
SYS_C00137065339	Check	"EMAIL" IS NOT NULL	-	-	-
SYS_C00137065340	Check	"FIRST_NAME" IS NOT NULL	-	-	-
SYS_C00137065341	Check	"LAST_NAME" IS NOT NULL	-	-	-
SYS_C00137065342	Check	"PHONE_NUMBER" IS NOT NULL	-	-	-
SYS_C00137065343	Check	"CURRENT_BALANCE" IS NOT NULL	-	-	-
CUSTOMER_PK	Primary Key	-	-	-	CUSTOMER_ID
CTR_EMAIL_UK	Unique Key	-	-	-	EMAIL
CTR_LCN_UK	Unique Key	-	-	-	LOYALTY_CARD_NUMBER

PART 2 – Adding a column

1. Desc customers table

    SQL Worksheet

    ```
    1   DESC customers;
    2
    3
    ```

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)

2. Add column that will satisfy the client.

    SQL Worksheet

    ```
    1 v ALTER TABLE customers
    2   ADD mobile_phone_number VARCHAR2(11);
    3
    ```

    Table altered.

3. DESCRIBE customers table

SQL Worksheet

```
1   DESCRIBE customers;
2
```

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)

PART 2 – Dropping a column

1. Describe customers table

SQL Worksheet

```
1   DESCRIBE customers;
2
```

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)

2. Drop column mobile phone number

SQL Worksheet

```
1 v  ALTER TABLE customers
2    DROP COLUMN mobile_phone_number;
3
```

Table altered.

3. Desc

SQL Worksheet

```
1    DESCRIBE customers;
2
```

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)