# Assignment 1

(DFo\_6\_3\_Project)

Database-07

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#### Part 1: Reading information from a script

In this exercise you will use the "obl Sports.ddl" file to consolidate your knowledge of DDL.

Open the "obl Sports.ddl" in a text editor.

1. How many tables have been created using the CREATE TABLE statement?

#### There are 10 CREATE TABLE statements:

```
CREATE TABLE sales_rep_addresses (
                         VARCHAR2(4) NOT NULL,
VARCHAR2(30) NOT NULL,
    address_line_1
    address_line_2
                         VARCHAR2(30),
                         VARCHAR2(15) NOT NULL.
    city
    zip_code
                         VARCHAR2(7) NOT NULL,
    CONSTRAINT sales_rep_address_pk PRIMARY KEY ( id )
                                                                        CREATE TABLE inventory_list (
   id VARCHAR2(11) NOT NULL,
   cost NUMBER(7,2) NOT NULL,
   units NUMBER(4) NOT NULL,
   CONSTRAINT inventory_list_pk PRIMARY KEY ( id )
CREATE TABLE teams (
                             VARCHAR2(4) NOT NULL,
                             VARCHAR2(20) NOT NULL.
    name
    number_of_players NUMBER(2) NOT NULL,
                                                                         CREATE TABLE items (
                                                                            ATE TABLE items (

'VARCHAR2(10) NOT NULL,

name VARCHAR2(20) NOT NULL,

description (ARCHAR2(20) NOT NULL,

category VARCHAR2(25) NOT NULL,

color VARCHAR2(15),

"Size" (HAR(1),

ilt_id VARCHAR2(11) NOT NULL,

CONSTRAINT item_pk PRIMARY KEY ( itm_number )
    discount NUMBER(2),
CONSTRAINT team_pk PRIMARY KEY ( id )
CREATE TABLE customers (
                               VARCHAR2(6) NOT NULL,
    ctr_number
email
                               VARCHAR2(50) NOT NULL,
    first_name
                               VARCHAR2(20) NOT NULL,
                                                                        VARCHAR2(30) NOT NULL,
    last name
    phone_number
                               VARCHAR2(11) NOT NULL,
    current_balance
                               NUMBER(6,2) NOT NULL,
                               VARCHAR2(4),
    sre_id
                               VARCHAR2(4),
    tem_id
    loyalty card number VARCHAR2(6),
    CONSTRAINT customer_pk PRIMARY KEY ( ctr_number ),
    CONSTRAINT ctr_email_uk UNIQUE (email),
CONSTRAINT ctr_lcn_uk UNIQUE (loyalty_card_number)
                                                                        CREATE TABLE sales_representatives (
id VARCHAR2(4) NOT NULL,
email VARCHAR2(50) NOT NULL,
first_name VARCHAR2(20) NOT NULL,
phone number VARCHAR2(11) NOT NULL,
phone number VARCHAR2(11) NOT NULL,
CREATE TABLE customers_addresses (
                       VARCHAR2(8) NOT NULL,
CREATE TABLE orders (
       id
                                       VARCHAR2(9) NOT NULL,
                                    DATE NOT NULL,
       odr_date
                                     DATE NOT NULL,
       odr_time
       number_of_units NUMBER(2) NOT NULL, ctr_number VARCHAR2(6) NOT NULL,
       CONSTRAINT orders_pk PRIMARY KEY ( id )
);
CREATE TABLE ordered_items (
       quantity_ordered NUMBER(3) NOT NULL,
       quantity_shipped NUMBER(3) NOT NULL,
                             VARCHAR2(10) NOT NULL,
       itm number
                                        VARCHAR2(9) NOT NULL,
       CONSTRAINT ordered_item_pk PRIMARY KEY ( itm_number,odr_id )
);
```

2. How many columns are created for the price history table?

#### There are 6 columns for the price history table

```
CREATE TABLE price_history (

start_date    DATE NOT NULL,
start_time    DATE NOT NULL,
price         NUMBER(7,2) NOT NULL,
end_date    DATE,
end_time    DATE,
itm_number    VARCHAR2(10) NOT NULL,

CONSTRAINT price_history_pk PRIMARY KEY ( itm_number, start_date, start_time ),
CONSTRAINT price_history_items_fk FOREIGN KEY ( itm_number ) REFERENCES items ( itm_number )

);
```

3. What statement is used to enforce the constraint that the category column of the items table must have a value?

#### **NOT NULL**

4. What is the name of the foreign key constraint between the customers and customer addresses tables?

## The Foreign key is (ctr\_number) from customers tables

```
ALTER TABLE customers addresses ADD CONSTRAINT customer_address_customer_fk FOREIGN KEY ( ctr_number ) REFERENCES customers ( ctr_number );
```

5. What are the lowest and highest values that can be stored in the commission\_rate column for the sales\_representatives table?

## The highest: 99, The lowest: 00

6. What are the lowest and highest values that can be stored in the price column for the price\_history

table?

#### The highest: 99999.99, The lowest: 00000.00

7. What are the 3 columns that make up the primary key for the price\_history table?

They are:

### Start\_date, start\_time, itm\_number

# **Part 2: Updating Constraints**

# Modifying a column

1 SELECT \* FROM orders
2 ALTER TABLE orders MODIFY odr\_date DATE DEFAULT SYSDATE

ID	ODR_DATE	ODR_TIME	NUMBER_OF_UNITS	CTR_NUMBER
or0101250	17-APR-17	17-APR-17	10	c00001
or0101350	24-MAY-17	24-MAY-17	5	c00001
or0101425	28-MAY-17	28-MAY-17	18	c00103
or0101681	02-JUN-17	02-JUN-17	10	c00001
or0101750	18-JUN-17	18-JUN-17	1	c01986

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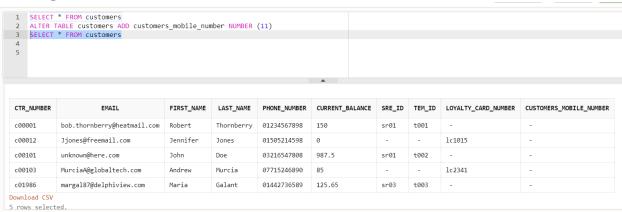
5 rows selected.

# Adding a check constraint



CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER	
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	=	
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	
ownload CSV									
c01986 margal87@delphiview.com Maria Galant 01442736589 125.65 sr03 to  Download CSV 5 rows selected.						t003	-		

# Adding a column



## Dropping a column

