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Subject : DATABASE LAB 1

* Exercise : Data Definition Language

* Part 1 : Reading information from a script

1. 10 tables.
2. 6 columns.
3. The 'NOT NULL' statement.
4. customer - address - customer - fk.
5. Highest value = 99.
Lowest value = -99
6. Highest value = 99999.99
Lowest value = -99
7. itm - number, start - date, start - time

* Part 2 : Updating Constraints.

* Modifying a column :

1. 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)

2. ALTER TABLE order

MODIFY odr-date DATE DEFAULT SYSDATE;

3. Same as question 1.

* Adding a check constraint.

1. 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. ALTER TABLE customers

ADD CONSTRAINT current_balance_below_zero CHECK (current_balance >= 0);

3. Same as question 1.

4.	Constraint	Type	Condition	Related Constraint	Related Table
	current_balance_ below_zero	Check	current_balance >= 0		

* Adding a column

1. 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. ALTER TABLE customers

ADD optional - phone - number VARCHAR2(11);

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)
OPTIONAL - PHONE - NUMBER	-	VARCHAR2(11)

* Dropping a column.

1. 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)
OPTIONAL - PHONE - NUMBER	-	VARCHAR2 (11)

2. ALTER TABLE customers

DROP COLUMN optional - phone - number ;

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)