Hands-On Assignment# 5

1. Modify the following SQL command so that the Rep_ID column is the PRIMARY KEY for the table and the default value of Y is assigned to the Comm column. (The Comm column indicates whether the sales representative earns commission.)

Answer.

```
CREATE TABLE store_reps
( rep_ID        NUMBER(5) PRIMARY KEY,
  last          VARCHAR2(15),
  first         VARCHAR2(10),
  comm          CHAR(1) DEFAULT 'Y');
```

2. Change the STORE_REPS table so that NULL values can't be entered in the name columns (First and Last).

Answer.

```
ALTER TABLE store_reps
MODIFY first VARCHAR2(10) NOT NULL;
ALTER TABLE store_reps
MODIFY last VARCHAR2(15) NOT NULL;
```

3. Change the STORE_REPS table so that only a Y or N can be entered in the Comm column.

Answer.

```
ALTER TABLE store_reps ADD CONSTRAINT comm_ck CHECK (comm IN ('Y','N'));
```

4. Add a column named Base_salary with a datatype of NUMBER(7,2) to the STORE_REPS table. Ensure that the amount entered is above zero.

Answer.

```
ALTER TABLE store_reps ADD base_salary NUMBER(7,2) CHECK(base_salary>=0);
```

5. Create a table named BOOK_STORES to include the columns listed in the following chart.

Answer.

```
CREATE TABLE BOOK_STORES
(Store_ID NUMBER(8) PRIMARY KEY,
 Name VARCHAR2(30) NOT NULL,
 Contact VARCHAR2(30),
 Rep_ID VARCHAR2(5),
 UNIQUE(Name));
```

6. Add a constraint to make sure the Rep_ID value entered in the BOOK_STORES table is a valid value contained in the STORE_REPS table. The Rep_ID columns of both tables were initially created as different datatypes. Does this cause an error when adding the constraint? Make table modifications as needed so that you can add the required constraint.

Answer.
ALTER TABLE book_stores
MODIFY (rep_ID NUMBER(5))
ADD CONSTRAINT rep_ID_fk FOREIGN KEY (rep_ID)
REFERENCES store_reps (rep_ID);

7. Change the constraint created in Assignment #6 so that associated rows of theBOOK_STORES table are deleted automatically if a row in the STORE_REPS table is deleted.

Answer.
ALTER TABLE book_stores
DROP CONSTRAINT rep_ID_fk
ALTER TABLE book_stores
ADD CONSTRAINT rep_ID_fk FOREIGN KEY(rep_ID)
REFERENCES store_reps(rep_ID) ON DELETE CASCADE;

8. Create a table named REP_CONTRACTS containing the columns listed in the following chart. A composite PRIMARY KEY constraint including the Rep_ID, Store_ID, and Quarter columns should be assigned. In addition, FOREIGN KEY constraints should be assigned to both the Rep_ID and Store_ID columns.

Column Name	**Datatype**
Store_ID	NUMBER(8)
Name	NUMBER(5)
Quarter	CHAR(3)
Rep_ID	NUMBER(5)

Answer.
CREATE TABLE REP_CONTRACTS(
store_ID NUMBER(8),
name NUMBER(5),
quarter CHAR(3),
rep_ID NUMBER(5),
CONSTRAINT REP_CONTRACTS_PK PRIMARY KEY (store_ID));

9. Produce a list of information about all existing constraints on the STORE_REPS table.

Answer.
SELECT constraint_name , constraint_type , search_condition, r_constraint_name FROM user_constraints WHERE table_name = 'STORE_REPS';

10. Issue the commands to disable and then enable the CHECK constraint on the Base_salary column.

Answer.
ALTERTABLEstore Reps Disable constraint store_reps_base_salary_ck;
ALTER TABLEstore_reps enable constraint store_reps_base_salary_ck;