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**UPA**

**Universidad Politécnica de Aguascalientes.**

**ISC06B**

**DATA BASE ADMINISTRATION**

# DP 12-3 PRACTICE

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**Database Programming with SQL**

**12-3: DEFAULT Values, MERGE, and Multi-Table Inserts**

**Practice Activities**

**Objectives:**

• Understand when to specify a DEFAULT value

• Construct and execute a MERGE statement

• Construct and execute DML statements using SUBQUERIES

• Construct and execute multi-table inserts

**Try It / Solve It**

**1.When would you want a DEFAULT value?**

When you want a field in a table not to be null and instead to standardize assigning a value, for example the system date to a date type field or a 0 to a hypothetical bonus field.

**2. Currently, the Global Foods F\_PROMOTIONAL\_MENUS table START\_DATE column does not have SYSDATE set as DEFAULT. Your manager has decided she would like to be able to set the starting date of promotions to the current day for some entries. This will require three steps:**

|  |  |
| --- | --- |
| Problem No: 2 | No. Rows in Result: |
| Currently, the Global Foods F\_PROMOTIONAL\_MENUS table START\_DATE column does not have SYSDATE set as DEFAULT. Your manager has decided she would like to be able to set the starting date of promotions to the current day for some entries. This will require three steps:   1. In your schema, Make a copy of the Global Foods F\_PROMOTIONAL\_MENUS table using the following SQL statement:   CREATE TABLE copy\_f\_promotional\_menus AS (SELECT \* FROM f\_promotional\_menus)   1. Alter the current START\_DATE column attributes using:   ALTER TABLE copy\_f\_promotional\_menus MODIFY(start\_date DATE DEFAULT SYSDATE)   1. INSERT the new information and check to verify the results.   INSERT a new row into the copy\_f\_promotional\_menus table for the manager’s new promotion. The promotion code is 120. The name of the promotion is ‘New Customer.’ Enter DEFAULT for the start date and '01-Jun-2005' for the ending date. The giveaway is a 10% discount coupon. What was the correct syntax used? | 1 |
| Text Code (No image) : | |
| --DP12-3  --Creating the copy  CREATE TABLE copy\_f\_promotional\_menus  AS (SELECT \* FROM f\_promotional\_menus);  --Adding the default  ALTER TABLE copy\_f\_promotional\_menus  MODIFY(start\_date DATE DEFAULT SYSDATE);  --Insert new row  Insert into copy\_f\_promotional\_menus  (CODE, NAME, START\_DATE, END\_DATE, GIVE\_AWAY)  VALUES (120, 'New customer', DEFAULT, TO\_DATE('01-Jun-2005', 'dd-mon-yy'), '10% discount coupon');  --Select  Select \* from copy\_f\_promotional\_menus where code = 120; | |
| Image Result: | |
|  | |

**3. Allison Plumb, the event planning manager for DJs on Demand, has just given you the following list of CDs she acquired from a company going out of business. She wants a new updated list of CDs in inventory in an hour, but she doesn’t want the original D\_CDS table changed. Prepare an updated inventory list just for her.**

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| --- | --- |
| Problem No: 3 | No. Rows in Result: |
| 3. Allison Plumb, the event planning manager for DJs on Demand, has just given you the following list of CDs she acquired from a company going out of business. She wants a new updated list of CDs in inventory in an hour, but she doesn’t want the original D\_CDS table changed. Prepare an updated inventory list just for her.  a. Assign new cd\_numbers to each new CD acquired  b. Create a copy of the D\_CDS table called manager\_copy\_d\_cds. What was the correct syntax used?  c. INSERT into the manager\_copy\_d\_cds table each new CD title using an INSERT statement. Make up one example or use this data: 20, 'Hello World Here I Am', 'Middle Earth Records', '1998' What was the correct syntax used?  d. Use a merge statement to add to the manager\_copy\_d\_cds table, the CDs from the original table. If there is a match, update the title and year. If not, insert the data from the original table. What was the correct syntax used? | 9 |
| Text Code (No image) : | |
| --Creating the copy  CREATE TABLE manager\_copy\_d\_cds  AS (SELECT \* FROM d\_cds);  --Insert new row  insert into manager\_copy\_d\_cds  (CD\_NUMBER, TITLE, PRODUCER, YEAR)  VALUES (20, 'HELLO WORLD HERE I AM', 'MIDDLE EARTH RECORDS', '1998');  --Merge  MERGE INTO manager\_copy\_d\_cds c USING d\_cds d  ON (c.cd\_number = d.cd\_number)  WHEN MATCHED THEN UPDATE  SET  c.title = d.title,  c.year = d.year  WHEN NOT MATCHED THEN INSERT  VALUES (d.cd\_number, d.title, d.producer, d.year);  --Select  select \* from manager\_copy\_d\_cds; | |
| Image Result: | |
|  | |

**4. Run the following 3 statements to create 3 new tables for use in a Multi-table insert statement. All 3 tables should be empty on creation, hence the WHERE 1=2 condition in the WHERE clause.**

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| Problem No: 4 | No. Rows in Result: |
| 4. Run the following 3 statements to create 3 new tables for use in a Multi-table insert statement. All 3 tables should be empty on creation, hence the WHERE 1=2 condition in the WHERE clause.  CREATE TABLE sal\_history (employee\_id, hire\_date, salary)  AS SELECT employee\_id, hire\_date, salary  FROM employees  WHERE 1=2;  CREATE TABLE mgr\_history (employee\_id, manager\_id, salary)  AS SELECT employee\_id, manager\_id, salary  FROM employees  WHERE 1=2;  CREATE TABLE special\_sal (employee\_id, salary)  AS SELECT employee\_id, salary  FROM employees  WHERE 1=2;  Once the tables exist in your account, write a Multi-Table insert statement to first select the employee\_id, hire\_date, salary, and manager\_id of all employees. If the salary is more than 20000 insert the employee\_id and salary into the special\_sal table. Insert the details of employee\_id, hire\_date, and salary into the sal\_history table. Insert the employee\_id, manager\_id, and salary into the mgr\_history table.  You should get a message back saying 39 rows were inserted. Verify you get this message and verify you have the following number of rows in each table:  Sal\_history: 19 rows  Mgr\_history: 19 rows  Special\_sal: 1 | 39 |
| Text Code (No image) : | |
| --Creating the 3 tables  CREATE TABLE sal\_history (employee\_id, hire\_date, salary)  AS SELECT employee\_id, hire\_date, salary  FROM employees  WHERE 1=2;  CREATE TABLE mgr\_history (employee\_id, manager\_id, salary)  AS SELECT employee\_id, manager\_id, salary  FROM employees  WHERE 1=2;  CREATE TABLE special\_sal (employee\_id, salary)  AS SELECT employee\_id, salary  FROM employees  WHERE 1=2;  --Insert Multi Table  INSERT ALL  WHEN salary > 20000 THEN  INTO special\_sal  VALUES (employee\_id, salary)  WHEN 1=1 THEN  INTO sal\_history  VALUES(employee\_id, hire\_date, salary)  INTO mgr\_history  VALUES(employee\_id, manager\_id, salary)  select employee\_id, hire\_date, salary, manager\_id  from employees;  --Selects  select \* from special\_sal;  select \* from sal\_history;  select \* from mgr\_history; | |
| Image Result: | |
| **Important note: in my case 20 records have appeared for the sal\_history and mgr\_history tables and 41 records in total, this is because earlier in class a twentieth record was added to the employees table, if this was not done 19 records should appear in these tables and 39 records in total.** | |