Database Programming with SQL
12-1: INSERT Statements
Practice Activities

Objectives

- Give examples of why it is important to be able to alter the data in a database
- Construct and execute INSERT statements that insert a single row using a VALUES clause
- Construct and execute INSERT statements that use special values, null values, and date values
- Construct and execute INSERT statements that copy rows from one table to another using a subquery

Vocabulary

Identify the vocabulary word for each definition below.

User	Someone doing “real work” with the computer, using it as a means rather than an end
transaction	Consists of a collection of DML statements that form a logical unit of work.
explicit	Fully and clearly expressed; leaving nothing implied
INSERT INTO	Adds a new row to a table

Try It / Solve It

Students should execute DESC tablename before doing INSERT to view the data types for each column. VARCHAR2 data-type entries need single quotation marks in the VALUES statement.

1. Give two examples of why it is important to be able to alter the data in a database.

   when reserving or booking a room/flight and when storing login information

2. DJs on Demand just purchased four new CDs. Use an explicit INSERT statement to add each CD to the copy_d_cds table. After completing the entries, execute a SELECT * statement to verify your work.

SELECT * FROM copy_d_cds ;

CD_Number	Title	Producer	Year
97	Celebrate the Day	R & B Inc.	2003
98	Holiday Tunes for All Ages	Tunes are Us	2004
99	Party Music	Old Town Records	2004
100	Best of Rock and Roll	Old Town Records	2004

```
INSERT INTO copy_d_cds(cd_number,title,producer,year)
VALUES(97,'Celebrate the Day','R & B Inc.','2003');
INSERT INTO copy_d_cds(cd_number,title,producer,year)
VALUES(98,'Holiday Tunes for All Ages','Tunes are Us','2004');
INSERT INTO copy_d_cds(cd_number,title,producer,year)
VALUES(99,'Party Music','Old Town Records','2004');
```

```
CREATE TABLE copy_d_cds
AS ( SELECT * FROM d_cds);
```

```
DESCRIBE copy_d_cds;
DESCRIBE d_cds;
```

```
INSERT INTO copy_d_cds(cd_number,title,producer,year)
VALUES(100,'Best of Rock and Roll','Old Town Records','2004');
```

```
CREATE TABLE copy_d_songs
AS ( SELECT * FROM d_songs);
```

```
DESCRIBE copy_d_songs;
DESCRIBE d_songs;
```

3. DJs on Demand has two new events coming up. One event is a fall football party and the other event is a sixties theme party. The DJs on Demand clients requested the songs shown in the table for their events. Add these songs to the copy_d_songs table using an implicit INSERT statement.

ID	Title	Duration	Type_Code
52	Surfing Summer	Not known	12
53	Victory Victory	5 min	12

```
INSERT INTO copy_d_songs
VALUES(52,'Surfing Summer',NULL,NULL,12);
```

```
INSERT INTO copy_d_songs
VALUES(53,'Victory Victory','5 min',NULL,12);
```

```
SELECT * FROM copy_d_songs ;
```

4. Add the two new clients to the copy_d_clients table. Use either an implicit or an explicit INSERT.

Client_Number	First_Name	Last_Name	Phone	Email
6655	Ayako	Dahish	3608859030	dahisha@harbor.net
6689	Nick	Neuville	9048953049	nnicky@charter.net

```
CREATE TABLE copy_d_clients
AS ( SELECT * FROM d_clients);
```

```
DESCRIBE copy_d_clients ;
DESCRIBE d_clients;
```

```
SELECT * FROM copy_d_clients ;
```

5. Add the new client's events to the copy_d_events table. The cost of each event has not been determined at this date.

ID	Name	Event_ Date	Description	Cost	Venue_ ID	Package_ Code	Theme_ Code	Client_ Number
110	Ayako Anniversary	07-Jul-2004	Party for 50, sixties dress, decorations		245	79	240	6655
115	Neuville Sports Banquet	09-Sep-2004	Barbecue at residence, college alumni, 100 people		315	87	340	6689

```
CREATE TABLE copy_d_events
AS ( SELECT * FROM d_events);
```

```
DESCRIBE copy_d_events ;
DESCRIBE d_events;
```

```
SELECT * FROM d_events ;
SELECT * FROM copy_d_events ;
```

6. Create a table called rep_email using the following statement:

```
CREATE TABLE rep_email (
id NUMBER(3) CONSTRAINT rel_id_pk PRIMARY KEY,
first_name VARCHAR2(10),
last_name VARCHAR2(10),
email_address VARCHAR2(10))
```

Populate this table by running a query on the employees table that includes only those employees who are REP's.

```
4. INSERT INTO copy_d_clients(client_number,first_name,last_name,phone,email)
VALUES(6655,'Ayako','Dahish',3608859030,'dahisha@harbor.net');
INSERT INTO copy_d_clients(client_number,first_name,last_name,phone,email)
VALUES(6689,'Nick','Neuville',3608859030,'nnicky@charter.net');
5.INSERT INTO copy_d_events(id,name,event_date,description,cost,venue_id,package_code,theme_code,client_number)
VALUES(110,'Ayako Anniversary',TO_DATE('07-Jul-2004','dd-Mon-yyyy'),'Party for 50, sixties dress,
decorations',0,245,79,240,6655);
INSERT INTO copy_d_events(id,name,event_date,description,cost,venue_id,package_code,theme_code,client_number)
VALUES(115,'Neuville Sports Banquet',TO_DATE('09-Sep-2004','dd-Mon-yyyy'),'Barbecue at residence, college alumni, 100
people',0,315,87,340,6689);
```



```
6. DESCRIBE rep_email ;
DESCRIBE employees;
```

```
6.  INSERT INTO rep_email(id, first_name, last_name, email_address)
SELECT employee_id, first_name, last_name, email
FROM employees
WHERE job_id LIKE '%\_REP' ESCAPE '\';
```