Lecture 8

Introduction to SQL - 2

Saturday 22,2001

INSERT Statement

■ Syntax

INSERT INTO *table* **[(** *column***[,** *column**..***])]**
{VALUES (*value* **[,** *value….***]) |** *subquery***}**

– have two main clauses
  • insert
  • values

– adds only one row at a time

INSERT Statement

- INSERT clause
  - used to specify the name of table to which row will be inserted and optionally the name of columns to which values will be inserted
  - if table name is mentioned only then values will be inserted in all the columns in that table implicitly
  - if column names are mentioned explicitly then values will be inserted in these columns only

INSERT Statement

- ■ VALUES clause
    - – used to specify the values for columns mentioned in insert clause
    - – number and type of values in values clause must match with the columns mentioned in insert clause
    - – you can provide NULL as value for some column if you have no value for that column

        values (3456,'martin',null)

    - – a select statement can be used in place of values clause for providing input values
    - – rule 2 is also applicable in case of subqueries

UPDATE Statement

- Syntax

UPDATE *table*
SET *column = value* **[,** *column = value* **, ….]**
[WHERE *condition*];

- – have three main clauses
  - update
  - set
  - where

- – can change more than one row at a time
- – where clause is same as select statement and used to specify the rows to be updated

UPDATE Statement

- **UPDATE clause**

  – used to specify the name of table

- **SET clause**

  – used to specify the name of columns where values to be changed and new values for those columns

  – another form of set clause is:

    SET (*column, column,..*) = (*subquery*)

  – in this case number of columns mentioned on left side must equal to the number of columns returned by subquery

  – if where clause is omitted all rows will be updated

DELETE Statement

- Syntax

DELETE [FROM] *table*
[WHERE *condition***];**

- have two main clauses
  - delete
  - where
- delete clause specifies the table from where rows to be deleted
- where clause is same as select statement and used to specify the rows to be deleted
- if where clause is omitted all rows in the table will be deleted

CREATE Statement

■ Syntax

CREATE TABLE *table*
{(*column* *datatype* **[DEFAULT** *expr* **] [,...]) | AS** *subquery* **};**

– *table* is name of table to create
– *column* is name of a column in that table
– *datatype* is data type of that column and size
– **DEFAULT** specifies the default value for that column
– a *subquery* can be used to provide data to the table at the time of creation
– if there is any computed column in subquery than provide an alias for that column

ALTER Statement

- Syntax

ALTER TABLE *table*
{ ADD (*column datatype* **[DEFAULT** *expr* **] [,...]) |**
MODIFY (*column datatype* **[DEFAULT** *expr* **] [,...]) };**

- *table* is name of table to alter
- *column* is name of a column in that table
- *datatype* is data type of that column and size
- **ADD** is used to add new column in the table
- **MODIFY** is used to change the existing column in the table

DROP Statement

- Syntax

  DROP TABLE *table* ;

  - *table* is name of table to drop
  - all data and structure in the table is deleted
  - all indexes are dropped

Assignment # 3

- Refer to **Annexure B** of **Introduction to SQL and PL/SQL** (pages 281 to 291)

- write queries for following purposes and also attach the output of that query. Output should be ordered properly

  - we want to prepare a report showing details of orders associated to each customer. Required columns in report are custid, ordid,prodid,actualprice,qty,itemtot.

  - we want to prepare a report showing details of sales of different products. Required columns in report are prodid,ordid,custid, actualprice,qty,itemtot.

  - A report showing total sales for each customer. Required columns are custid and total, where total is the sum of amounts spent by that customer on the purchase of different products through different orders.

  - A report showing total sales for each product. Required columns are prodid and total, where total is the sum of amounts earned through sales of that product through different orders.

- Due Date: 05/10/2001