Chapter 6: Basic SQL Outline

Terminology: Table, row, column => relation, tuple, attribute (respectively)

CREATE statement: Main SQL command for data definition

Each statement in SQL ends with a semicolon

CREATE TABLE Command: Specifying a new relation

Example: CREATE TABLE EMPLOYEE …

Relational Model has 3 basic constraints:

+ Key constraint: A primary key value cannot be duplicated

+ Entity Integrity: A primary key value cannot be null

+ Referential integrity: The “foreign key” must have a value that is already presented as a primary key

SELECT statement

SELECT <attribute list>

FROM <table list>

WHERE <condition>;

<attribute list> is a list of attribute names whose values are to be retrieved by the query.

<table list> is a list of the relation names= required to process the query.

<condition> is a conditional (Boolean) expression that identifies the tuples to be retrieved by the query

SELECT => column, WHERE => row

Aliases, or tuple variables => self-referencing table or same attributes that are shared among tables

INSERT, DELETE, and UPDATE statements

INSERT: inserts a tuple (or more) (row) in a relation (table), attribute values should be listed in the same as order as the attributes were specified in CREATE TABLE command => INSERT INTO

DELETE: remove a tuple from relation => DELETE FROM