

Chapter 07. Database manipulation. More exercises.

1. Write SQL update statements to do the following on the database schema shown in chapter01 (COMPANY)

- (a) Insert a new course, <'Financial Accounting', 'fac4390', 5, 'BUSINESS'>.
- (b) Insert a new section, <145, 'fac4390', 'Fall', '17', 'Hanif' >.
- (c) Insert a new student, <'Robin', 34, 3, 'BUSINESS'>.
- (d) Update the record for the student whose student number is 17 and change his class from 1 to 3.

Answers:

- (a) INSERT INTO COURSE VALUES ('Financial Accounting', 'fac4390', 5, 'BUSINESS');
- (b) INSERT INTO SECTION VALUES (145, 'fac4390', 'Fall', '17', 'Hanif');
- (c) INSERT INTO STUDENT VALUES ('Robin', 34, 3, 'BUSINESS');
- (d) UPDATE STUDENT SET Class = 3 WHERE Student_number= 17;

2. Consider the following Hotel, Room, Booking and Guest schemas in a DBMS. The hotelNo is the primary key for Hotel table and roomNo is the primary key for the Room relation. Booking stores the details of room reservations and bookingNo is the primary key. Guest stores the guests details and guestNo is the primary key.

Hotel	(<u>hotelNo</u> , hotelName, hotelType, hotelAddress, hotelCity, numRoom)
Room	(<u>roomNo</u> , hotelNo, roomPrice)
	CAj: {hotelNo -> Hotel}
Booking	(<u>bookingNo</u> , hotelNo, guestNo, checkIn, checkOut, totalGuest, roomNo)
	CAj: {hotelNo -> Hotel}
	CAj: {guestNo -> Guest}
Guest	(<u>guestNo</u> , firstName, lastName, guestAddress)

Insert the following values into the hotel table and update the price of all rooms by 15%.

hotelNo	hotelName	hotelType	hotelAddress	hotelCity	numRoom
H1001	Hilton Hong Kong	Luxury	Beach Street	Hong Kong	200

Answer:

INSERT INTO Hotel VALUES ('H1001', 'Hilton Hong Kong', 'Luxury', 'Beach Street', 'Hong Kong', 200);
UPDATE Room SET roomPrice = price*1.15;