

CIT6114 - Database Fundamentals

Lab 7

Note to student: This tutorial is based on the tables and values created in previous tutorial (i.e., Tutorial 6). Please ensure that you have created all the four tables and records are inserted before attempting Tutorial 7.

Part A

- Q1. Write the SQL statement to add an additional column called "InvoicePrice" into the Invoice table.
- Q2. Update the newly created column InvoicePrice in to calculate the total amount each buyer has to pay for each purchase based on the item quantity purchased and the item unit price (obtained from the item table).
- Q3. List the most expensive item name and price in the company inventory.
- Q4. Show the total number of active buyers.
- Q5. Display the total price amount of invoice which have the item quantity purchase more then or equals to 10.
- Q6. The company has decided to increase the stock of each item by 5 for items with the type "Electrical". Write the SQL statement to update each item price.

Part B (Extra Questions)

- i. Write the SQL statement to retrieve the SalesPerson name, Item name, and Buyer name for Item which have the price greater than the average item price.
- ii. Write the SQL statement to display the BuyerName, BuyerPhone and Total_Price (generated as the result of the total for InvoicePrice) whom make a purchase in the month of March 2008.

Part C (Extra Questions)

Note to tutor: Students are encouraged to try i. and ii. themselves once Lecture 7 is covered.

- i. Write the trigger so that when a buyer purchase an item, Item Price in invoice is automatically updated based on the respective Item Price. Create the trigger.
- ii. Create a new invoice again to test the created trigger in question 7 with the following information:-
 - Invoice ID = 10018
 - Buyer name is Martin
 - Invoice Quantity = 2
 - Date of invoice 26/01/2008
 - Sales person in charge Zelda
 - Item Purchase is Nokia Phone
 - Invoice Price = NULL (the trigger in question 5 should automatically update this)