Saturday, July 05, 2014

ICE 408
DBMS LAB
Assignment: 03

Task 1. Create a database called Shops.
Task 2. Create 3 tables in the Shops database having the structure as shown below.

1. Table Name : CustomerAndSuppliers

Field name	Data type	Size	Requirement
cusl_id	Character	6	1. Primary key 2. Starting with C or S and then 5 digits i.e. C00001 or S0001.
cusl_fname	character	15	NULL not allowed
cusl_lname	character	15	Use variable character size
cusl_address	text	50	
cusl_telno	character	12	Must follow the format like 012-34567890
cusl_city	character	12	Default value is Rajshahi
sales_amnt	money		Negative values not allowed
proc_amnt	money		Negative values not allowed

2. Table Name : Items

Field name	Data type	Size	Requirement
item_id	Character	6	1. Primary key 2. Starting with P and then 5 numbers i.e. A0001.
item _name	character	12	
item_category	character	10	Example: Electrical, Mechanical, Software, Books etc.
item _price	float	12	Negative values not allowed
item_qoh	integer		Negative values not allowed
item_last_sold	date		Default value is current date

2. Table Name : Transactions

Field name	Data type	Size	Requirement
tran_id	Character	10	1. Primary key 2. Starting with T and then 9 numbers i.e. T000000001.
item _id	character	6	Foreign key with reference to item table
cust _id	character	5	Foreign key with reference to customer table
tran_type	character	1	Either S or O, (S for sales Order to supplier)
tran_quantity	integer	12	Only positive values.
tran_date	date and time		Default is current date

Task 3: Insert some sample data into CustomerAndSuppliers and Item tables.
Task 4: Write a stored procedure that prints out item categories, total number items available and average price of that category in the following format.

Category	Total number of items	Average Price

Task 5: Write a stored procedure that
a) Accepts as input i) category name and ii) price value
b) And shows the item details under that category that are cheaper than the accepted price value.

Task 6: Write a stored procedure that
a) Accepts as input i) category name and ii) price value
b) And increase the price of each item until the average price crosses the given price value.

Task 7: Write a trigger on Transaction that automatically updates the item_qoh field of item table whenever a transaction takes place .

Task 8: Write a trigger on Transaction that automatically updates the sold_amnt or proc_amnt field of CustomersAndSuppliers table whenever a transaction happens.

Task 9: From Transaction table show a report of total transaction quantity for every item in the following format.

Item ID	Total sales amount
A0001	34
A0002	20
