National University of Computer and Emerging Sciences

In-Lab 6Exercise

"Stored Procedures and Views"

Database Systems

SPRING 2023

Department of Computer Science
FAST-NU, Lahore, Pakistan

Total Time: 60 Minutes

Schema:

Schema is given in InLab6OrderCustomerSchema.sql file.

ORDER

OrderNo	CustomerNo	Date	Total_Items_Ordered
1	C1	2012-12-11	30
2	C3	2016-12-01	5
3	C3	2017-01-01	20
4	C4	2017-01-02	15

ORDER DETAILS

OrderNo	ItemNo	Quantity
1	200	20
1	400	10
2	200	5
3	200	60

ITEMS

ItemNo	Name	Price	Quantity in Store
100	A	1000	100
200	B	2000	50
300	C	3000	60
400	D	6000	400

CUSTOMERS

CustomerNo	Name	City	Phone
C1	AHMED ALI	LHR	111111
C2	ALI	LHR	222222
C3	AYESHA	LHR	333333
C4	BILAL	KHI	444444
C5	SADAF	KHI	555555
C6	FARAH	ISL	6666...

Exercise for Views:

1. Create a View that gives order number and total price of that order (price= item price * item Quantity)
2. Create a View that gives all the items that are doing well in sales. The criteria to judge which item is doing good sale is that the item is has sold more than 20 pieces.
3. Create a view that return StarCustomers. StarCustomers are the customers who have made a purchase of more than 2000.
4. Create a view that returns all the customers that have phone number not null.
   Create it without **with check** option.
   Create the same view with **WITH CHECK** option.
   a. Now try to insert, delete and update though the view, and observe the results.

Exercise for Stored Procedures:

1. Create a stored procedure that takes order number, item number and quantity as input.
   If quantity of that item present in store is less than ordered quantity. Print a message 'Only <quantity in store> is present, which is less than your required quantity.'
   If enough quantity is present in store insert the order detail in order details table and subtract the ordered quantity from quantity in store, for that ordered item.Write it'sexecute statement as well.

2. You have to create a store procedure to cancel an order.It should take customer number and order no as an input, if that customer has placed that order, the order should be deleted and along with that all of its details should also be deleted. If that order number was not placed by that customer, it should print a message ‘Order no <as taken from input> is not of <customerNo><customerName>’. Write it’s execute statement as well.
3. Every customer gets 1 point on purchase of Rs100. Create a procedure that takes customer name as input and return his total points. Write it’s execute statement as well.