

National University of Computer and Emerging Sciences



In-Lab 5 Exercise

“Stored Procedures and Views”

Database Systems

Fall 2023

Department of Computer Science
FAST-NU, Lahore, Pakistan

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 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's execute statement as well.
2. You have to create a customer signup stored procedure. It will take all the information of Customer (No, Name City, Phone). At the end of procedure it should return a flag (as output parameter) that should tell the violation of following rules:
 - a. Rule1: It should check that the customer No should be unique, so if any existing user has same user number it should return the Flag as 1.
 - b. Rule 2: City cannot be null, if city is null it should return flag as 2.
 - c. Rule 3: Phone number should be of 6 numbers, if it's less or more it should flag as 3.
 - d. If all the above rules are satisfied then customer should be inserted, and flag should be returned as 0.

Write it's execute statement as well.

3. 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.
4. 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.