

CSE4126: Distributed Database Systems Lab

Online 2: Section C2

Marks-10

A database schema of a restaurant management system is given as follows:

Customer(cid: integer, *cname*: string, *phone*: string)

Server(sid: integer, *sname*: string, *shiftID*[FK]: integer)

Food(fID: integer, *fname*: string, *price*: integer)

ShiftDetails(shiftID: integer, *duration_hours*: integer)

Orders(*oID*: integer, *sID*[FK]: integer, *cID*[FK]: integer, *fID*[FK]: integer, *orderPlaced*: timestamp)

A database file(**database.sql**) containing some preliminary data has been provided. You have to run the sql file first. Then you have to write a query in PL/SQL that solves the question given after the tables.

Customer Table:

cid	cname	phone
1	Shadhin	01711122333
2	Shahrin	01711122334
3	Ramisa	01711122335
4	Maisha	01711122336
5	Jim	01711122337

Server Table:

sid	sname	shiftid
1	mohammad	1
2	ahmed	1
3	abdullah	2
4	masud	2
5	mamun	1

Food Table:

fid	fname	price
1	tacos	199
2	nachos	159
3	fried rice	299
4	chicken fry	99
5	milkshake	149

ShiftDetails Table:

shiftid	duration_hours
1	5
2	8

Orders Table:

oid	sid	cid	fid	datePlaced
1	2	1	1	11-Feb-22
	2	1	2	11-Feb-22
	2	1	3	11-Feb-22
	2	1	4	11-Feb-22
2	3	3	1	11-Feb-22
	3	3	2	11-Feb-22
	3	3	3	11-Feb-22
3	2	2	1	12-Feb-22
	2	2	2	12-Feb-22
4	2	5	3	12-Feb-22
	2	5	4	12-Feb-22
5	1	4	1	13-Feb-22
	1	4	2	13-Feb-22
6	4	1	1	13-Feb-22

	4	1	2	13-Feb-22
	4	1	3	13-Feb-22
	4	1	5	13-Feb-22

Question:

Take server ID (*sID*) as user input.

- If it is valid, show how many customers they served in the year 2022. Use a function to do these tasks. *[marks: 5]*
- If it is invalid, insert a row into the Server table for that sID using procedure. Make sure to autoincrement sID using trigger.

Note: Make sure the foreign key dependencies are maintained while inserting data. [marks: 5]