CSE4126: Distributed Database Systems Lab

Online 2: Section A1

Marks-10

A database schema of a restaurant management system is given as follows:
Customer(<u>*cID*</u>*:* integer*, cname:* string*, phone:* string**)**
Server(<u>*sID*</u>*:* integer*, sname:* string*, shiftID[FK]:* integer**)**
Food(<u>*fID*</u>*:* integer*, fname:* string*, price:* integer**)**
ShiftDetails(<u>*shiftID*</u>*:* 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 as follows:

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 shift ID *(shiftid)* as user input. Keep the following procedure and function in a package.

- **If it is valid, show which servers are working during that shift. Then, for each server, show how many customers they have served in the year 2022. Use a function to do these tasks. *[marks: 7]***
- **If it is invalid, insert a row in the ShiftDetails table for this *shiftid,* where duration_hours is 7. Do this in a procedure. Create a trigger that prints "Row inserted into ShiftDetails table." after the row is inserted. [marks: 3]**