PSG College of Technology - Coimbatore

Department of Applied Mathematics and Computational Sciences

V M.Sc. Theoretical Computer Science – 15XT57 Database Design Lab

Work Sheet – 3

Consider the given database consisting of four relations:

Person(name, age, gender) // name is a key

Frequents(name, pizzeria) // [name,pizzeria] is a key

Eats(name, pizza) // [name,pizza] is a key

Serves(pizzeria, pizza, price) // [pizzeria,pizza] is a key

Person

name	age	gender
Amy	16	female
Ben	21	male
Cal	33	male
Dan	13	male
Eli	45	male
Fay	21	female
Gus	24	male
Hil	30	female
Ian	18	male

Frequents

name	pizzeria
Amy	Pizza Hut
Ben	Chicago Pizza
Ben	Pizza Hut
Cal	New York Pizza
Cal	Straw Hat
Dan	New York Pizza
Dan	Straw Hat
Eli	Chicago Pizza
Eli	Straw Hat
Fay	Dominos
Fay	Little Caesars
Gus	Chicago Pizza
Gus	Pizza Hut
Hil	Dominos
Hil	Pizza Hut
Hil	Straw Hat
Ian	Dominos
Ian	New York Pizza
Ian	Straw Hat

Eats

name	pizza
Amy	mushroom
Amy	pepperoni
Ben	cheese
Ben	pepperoni
Cal	supreme
Dan	cheese
Dan	mushroom
Dan	pepperoni
Dan	sausage
Dan	supreme
Eli	cheese
Eli	supreme
Fay	mushroom
Gus	cheese
Gus	mushroom
Gus	supreme
Hil	cheese
Hil	supreme
Ian	pepperoni
Ian	supreme

Serves

pizzeria	pizza	price
Chicago Pizza	cheese	7.75
Chicago Pizza	supreme	8.5
Dominos	cheese	9.75
Dominos	mushroom	11
Little Caesars	cheese	7
Little Caesars	mushroom	9.25
Little Caesars	pepperoni	9.75
Little Caesars	sausage	9.5
New York Pizza	cheese	7
New York Pizza	pepperoni	8
New York Pizza	supreme	8.5
Pizza Hut	cheese	9
Pizza Hut	pepperoni	12
Pizza Hut	sausage	12
Pizza Hut	supreme	12
Straw Hat	cheese	9.25
Straw Hat	pepperoni	8
Straw Hat	sausage	9.75

Write interactive PL/SQL Block/Stored Procedures/Functions to perform the following. You should use only JOINS for retrieval operations. No subqueries permitted.

1. Create block to display all the rows in the person table.
2. Create a PL/SQL block that fetches and displays the first three preferred pizzas. Order your output so that the pizza with the highest count is displayed first.
3. To insert records into person and serves.
4. To increase the price of Dominos pizza by 10% . And display the number of records updated.
5. Find all pizzas eaten by at least one female over the age of 20.
6. Find the names, age of all females who eat at least one pizza served by Straw Hat.
7. Find all pizzerias that serve at least one pizza for less than $10 that either Amy or Fay (or both) eat.
8. Find all pizzas that are eaten only by people younger than 24, or that cost less than $10 everywhere they're served.
9. Find the age of the oldest person (or people) who eat mushroom pizza.
10. Find all pizzerias that serve every pizza eaten by people over 30.
11. Find all pizzerias where pepperoni pizza cost less than supreme pizza in the Pizza Hut pizzeria.
12. Determine the average price of pizza for every pizzas but only for those pizzas what is served at least three pizzerias!
13. Find the pizzeria where the average price of the pizzas is the highest.
14. Modify the procedure (4). to find the names of all MALES who eat at least one pizza served by Straw Hat.(use user_procedures)
15. Write a query against a Data Dictionary view to show you a list of procedures you own.