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Database

Eidson

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Homework 3

1. **List the name and phone number of all customers who live in Missouri who have ordered a lettuce wrap.**

SELECT C.phoneNum, C.name

FROM Customers C, Address A, Orders O, Burgers B, Ingredients I, Made of M

INNER JOIN Orders O ON (O.ordernum = M.itemname)

WHERE A.State = “Missouri” and M.itemName = “Lettuce Wrap”

Relational Algebra: (+ = joins)\*

1. **List the name and phone number of all customers who live in Illinois who have ordered a Buffalo Patty.**

SELECT C.phoneNum, C.name

FROM Customers C, Address A, Orders O, Burgers B, Ingredients I, Made of M

INNER JOIN Orders O ON (O.ordernum = M.itemname)

WHERE A.State = “Illinois” and M.itemName = “Buffalo Patty”

Relational Algebra: (+ = joins)\*

1. **List the name and phone number of all customers who have ordered a Buffalo Patty or a Gluten Free Bun. \*From reading this I assumed that Gluten Free Bun was an actual a la carte item on the menu\***

SELECT C.phoneNum, C.name

FROM Customers C, Orders O, Burgers B, Ingredients I, Made of M

INNER JOIN Orders O ON (O.ordernum = M.itemname)

WHERE M.itemName = “Buffalo Patty” OR M.itemName = “Gluten Free Bun”

Relational Algebra: (+ = joins)\*

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1. **What is the most popular item from each Category.**

SELECT C.categoryName, count(C.categoryName)

FROM Category C

GROUP BY C.categoryName

ORDER BY count(C.categoryName) DESC

1. **What is the average number of burgers ordered from customers**

SELECT O.OrderNum, AVG(Order.quantity)

FROM Order O, Ingredients I

WHERE I.itemname = “Burger” O.OrderNum = I.itemName

1. **How many customers that order burgers with more than two patties**

SELECT C.phonenum , count(Ingredients.quantity)

FROM Order O, Ingredients I

GROUP BY C.phonenum

WHERE I.itemname = “Patty” HAVING count(\*) > 2

1. **How many allergens does each menu item have?**

SELECT I.ItemName, A.allergenName

FROM Ingredients I, Allergens A

GROUP BY I.ItemName, A.allergenName

HAVING count(\*) > 0