# Lab2DBGisolfi

## Database Management Lab 2

###11.Get Dish numbers for dishes ordered from any restaurant by a customer from the same city as that restaurant’s headquarters.

SELECT DISTINCT O.DNum

FROM Customers AS C, Restaurants AS R, Orders AS O

WHERE R.HQLocation = C.Hometown

AND C.Cnum = O.CNum

AND R.RNum = O.RNum;

\_\_Cardinality\_\_ = 6

Query11

DNum

D1

D2

D3

D4

D5

D6

###12.Name the restaurants that have orders from at least one customer who is not from the same city as that restaurant’s headquarters.

SELECT DISTINCT R.RestaurantName

FROM Customers AS C, Restaurants AS R, Orders AS O

WHERE R.HQLocation <> C.Hometown

AND C.CNum = O.CNum

AND R.RNum = O.RNum;

\_\_Cardinality\_\_ = 8

RestaurantName

BombayPalace

CheesecakeFactory

Giacomos

GoldenDragon

SiamPalace

SoupPlantation

SzechuanPalace

###13.Get all pairs of dish numbers such that some customer has ordered both the indicated dishes.

SELECT DISTINCT Dish1.DNum, Dish2.DNum

FROM Orders AS DISH1, Orders AS DISH2

WHERE Dish1.CNum = DIsh2.CNum

AND Dish1.DNum <> Dish2.DNum;

\_\_Cardinality\_\_ = 30

###14.Get the total number of restaurants that have order(s) from customer C500.

SELECT COUNT(\*) AS R\_TOTAL

FROM (SELECT DISTINCT O.RNum

FROM Orders AS O

WHERE O.CNum = 'C500');

\_\_Cardinality\_\_ = 1

Query14

R\_TOTAL

4

###15.Get the total quantity for all orders made by customer C100 of dish D1.

SELECT COUNT(\*) AS ORDER\_QTY

FROM Customers AS C, Restaurants AS R, Orders AS O

WHERE O.CNum = 'C100'

AND O.DNum = 'D1'

AND C.CNum = O.CNum

AND R.RNum = O.RNum;

\_\_Cardinality\_\_ = 1

Query15

ORDER\_QTY

2

###16.For each dish ordered from a restaurant, get the dish number, the restaurant number, and the total quantity (for that dish ordered from that restaurant).

SELECT O.DNum, O.RNum, SUM(O.Quant) AS QTY\_SUM

FROM Dishes AS D, Restaurants AS R, Orders AS O

WHERE D.DNum = O.DNum

AND R.RNum = O.RNum

AND D.DNum = O.DNum

GROUP BY O.DNum, O.RNum;

\_\_Cardinality\_\_ = 24

DNum RNum QTY\_SUM

D1 R10 2

D1 R40 8

D2 R20 2

D2 R40 1

D3 R10 6

D3 R20 2

D3 R30 2

D3 R40 7

D3 R50 6

D3 R60 4

D3 R70 8

D4 R20 5

D4 R40 8

D5 R20 1

D5 R40 4

D5 R50 5

D5 R70 1

D6 R20 2

D6 R30 3

D6 R40 5

D6 R70 3

###17.Get dish numbers of dishes ordered with an average quantity of more than 3.

SELECT DISTINCT O.DNum

FROM ORDERS AS O, (SELECT DISTINCT AVG(O.Quant > 3) AS ORDER\_QTY\_AVG FROM ORDERS AS O);

\_\_Cardinality\_\_ = 6

DNum

D1

D2

D3

D4

D5

D6

###18.Name the restaurants that have orders from Sheldon.

SELECT R.RestaurantName, COUNT(\*) AS ORDERS

FROM Orders AS O, Customers AS C, Restaurants AS R

WHERE C.CustName = 'Sheldon'

AND C.CNum = O.CNum

AND R.RNum = O.RNum

GROUP BY R.RestaurantName;

\_\_Cardinality\_\_ = 2

Query18

RestaurantName ORDERS

CheesecakeFactory 1

SiamPalace 1

###19.Get the ListPrice of dishes ordered by Sheldon.

SELECT D.ListPrice

FROM Orders AS O, Customers AS C, Dishes AS D

WHERE C.CustName = 'Sheldon'

AND D.DNum = O.DNum

AND C.CNum = O.CNum;

\_\_Cardinality\_\_ = 2

Query19

ListPrice

9.99

9.99

###20.Name the dishes available from any restaurant whose headquarters is in Houston.

SELECT DISTINCT D.DishName

FROM Restaurants AS R, Dishes AS D, Orders AS O

WHERE R.HQLocation = 'Houston'

AND D.DNum = O.DNum

AND O.RNum = R.RNum;

\_\_Cardianlity\_\_ = 3

DishName

BurritoGrande

ChickenSatay

SteamedDumpling