

Working SQL statements

1 Credentials (Login)

#return 0 if the login information doesn't match; return 1 if find the username and corresponding password

```
SELECT COUNT( * )  
FROM registereduser  
WHERE username = '{}'  
AND password = '{}'
```

```
SELECT COUNT( * ) as user  
FROM registereduser  
WHERE username = 'edo'  
AND password = '1234'
```

#determine if it is a restaurant owner or not. Return 0 if the login information doesn't match; return 1 if find the username and corresponding password, and he/she is a restaurant owner.

```
SELECT COUNT( * ) AS num, email  
FROM operatorowner  
WHERE username  
IN (
```

```
SELECT username  
FROM registereduser  
WHERE username = 'chuney'  
AND PASSWORD = '1234'  
)
```

#determine if it is a inspector or not. Return 0 if the login information doesn't match; return 1 if find the username and corresponding password, and he/she is a inspector.

```
SELECT COUNT( * ) AS num, iid  
FROM inspector  
WHERE username  
IN (
```

```
SELECT username  
FROM registereduser  
WHERE username = 'edo'  
AND PASSWORD = '1234'  
)
```

-----example-----

```
SELECT COUNT( * )  
FROM registereduser  
WHERE username = 'edo'  
AND password = '1234'
```

2 Restaurant Search

#The SQL to search for rid for each entry entered.

```
SELECT rid
FROM restaurant NATURAL JOIN inspection
WHERE totalscore >(<)'{}' AND zipcode = '{}'
SELECT rid
FROM restaurant NATURAL JOIN inspection
WHERE totalscore >(<)'{}' AND zipcode = '{}' AND name = '{}'
SELECT rid
FROM restaurant NATURAL JOIN inspection
WHERE totalscore >(<)'{}' AND zipcode = '{}' AND cuisine = '{}'
SELECT rid
FROM restaurant NATURAL JOIN inspection
WHERE totalscore >(<)'{}' AND zipcode = '{}' AND name = '{}' AND cuisine = '{}'
```

#Get Information for each rid selected above

```
SELECT r.name AS restaurant, CONCAT( r.county, " ", r.street, " ", r.city, " ", r.state ) AS Address,
r.cuisine AS Cuisine, ifinal.totalscore AS 'Last Inspection Score', ifinal.idate AS 'Date of Last Inspection'
FROM restaurant AS r
NATURAL JOIN (
  SELECT i.rid, i.idate, i.totalscore
  FROM inspection AS i
  NATURAL JOIN (
    SELECT rid, MAX( idate ) idate
    FROM inspection
    GROUP BY rid
  ) imaxdate
) AS ifinal
WHERE r.rid IN (
  '{}'
)
ORDER BY ifinal.totalscore DESC
```

-----example-----

```
SELECT r.name AS restaurant, CONCAT( r.county, " ", r.street, " ", r.city, " ", r.state ) AS Address,
r.cuisine AS Cuisine, ifinal.totalscore AS 'Last Inspection Score', ifinal.idate AS 'Date of Last Inspection'
FROM restaurant AS r
NATURAL JOIN (
  SELECT i.rid, i.idate, i.totalscore
  FROM inspection AS i
  NATURAL JOIN (
    SELECT rid, MAX( idate ) idate
    FROM inspection
    GROUP BY rid
  ) imaxdate
) AS ifinal
WHERE r.rid IN (
  SELECT rid
  FROM restaurant
```

```

NATURAL JOIN inspection
WHERE totalscore >4
AND zipcode = '30080'
)
ORDER BY ifinal.totalscore DESC

```

#kj's example:

```

SELECT r.name AS restaurant, CONCAT( r.county, " ", r.street, " ", r.city, " ", r.state ) AS Address,
r.cuisine AS Cuisine, ifinal.totalscore AS 'Last Inspection Score', ifinal.idate AS 'Date of Last Inspection'
FROM restaurant AS r
NATURAL JOIN (
  SELECT i.rid, i.idate, i.totalscore
  FROM inspection AS i
  NATURAL JOIN (
    SELECT rid, MAX( idate ) idate
    FROM inspection
    GROUP BY rid
  ) imaxdate
) AS ifinal

```

```

WHERE
r.zipcode = '30080'
AND ifinal.totalscore > 4

```

```

ORDER BY ifinal.totalscore DESC

```

3 Customer Complaint

display all the restaurant to let customer choose.

```

SELECT rid, name, street, CONCAT( city, " ", state ) AS Area, zipcode
FROM restaurant

```

#Insert a row into the customer table

```

INSERT INTO customer
VALUES ('phone', 'firstname', 'lastname' )

```

#Insert a row into the complaint table

```

INSERT INTO complaint
VALUES ('rid','phone','cdate' , 'description')

```

-----example-----

#Insert a row into the customer table

```

INSERT INTO customer
VALUES ('4043458899', 'fangyun', 'shi' )

```

#Insert a row into the complaint table

```

INSERT INTO complaint
VALUES (11, '4043458899', 2015-05-13 , 'it was so dark!' )

```

4 Restaurant information

#inserting information about restaurant

```
INSERT INTO restaurant
VALUES (
    (
        SELECT COUNT( m.rid ) +1
        FROM restaurant AS m
    ), 'phone', 'name', 'county', 'street', 'city', 'state', 'zipcode', 'cuisine', 'email'
)
```

INSERT INTO healthpermit

```
VALUES (
    'hpid', 'expirationdate', (
        SELECT MAX( rid )
        FROM restaurant
    )
)
```

-----example-----

```
INSERT INTO restaurant
VALUES (
    (
        SELECT COUNT( m.rid ) +1
        FROM restaurant AS m
    ), '4043458899', 'Panda', 'Fulton', '10th street', 'Atlanta', 'GA', '30309', 'Chinese', 'chuney@gmail.com'
)
```

INSERT INTO healthpermit

```
VALUES (
    '21', '2019-07-12', (
        SELECT MAX( rid )
        FROM restaurant
    )
)
```

5a/b Search Restaurant Health Inspection

#let user(restaurant owner) select the restaurant information associated with him/her from the list.

```
SELECT rid AS RestaurantID, name AS RestaurantName, CONCAT( street, " ", state, " ", city, " ",
zipcode ) AS Address
FROM restaurant
WHERE email = 'chuney@gmail.com'
```

#return the last two inspection information for the selected restaurant

```
SELECT idate, totalscore, passfail
FROM inspection
WHERE rid = '14'
```

```
ORDER BY idate DESC  
LIMIT 2
```

```
# for each idate and rid, search the score when there is only one inspection
```

```
SELECT itemnum, description, score, idate  
FROM `contains`  
NATURAL JOIN item  
WHERE rid =14  
AND idate = '2015-02-27'  
ORDER BY itemnum ASC
```

```
#Also display the second inspection result when it exists
```

```
SELECT score  
FROM  
CONTAINS  
WHERE rid = '14'  
AND idate = '2015-01-27'  
ORDER BY itemnum ASC.
```

6a Inspection Report

```
#Display the inspection form
```

```
SELECT itemnum AS 'Item Number', description AS 'Item Description', critical AS 'Critical', perfectscore  
'Perfect Score'  
FROM item
```

```
# Insert general inspection information first
```

```
INSERT INTO inspection VALUES (1,1,'2015-07-12',90,'PASS')
```

```
#eg,insert score for item 1-3 to detailed inspection form
```

```
INSERT INTO `contains`(itemnum, rid, idate, score)  
VALUES (1,1,'2015-07-12', 8),(2,1,'2015-07-12', 4),(3,1,'2015-07-12', 9)
```

6b Inspection Comments

```
# Insert inspection comments
```

```
INSERT INTO `includes` ( itemnum, rid, idate, comment)  
VALUES ( 1, 14, '2015-01-27', 'It is not good' )
```

7a Inspection Summary Report by County/Cuisine

```
#For the first three columns
```

```
SELECT r.county AS County, r.cuisine AS Cuisine,COUNT(*)  
FROM restaurant AS r,inspection AS i  
WHERE MONTH(idate) = 1 and YEAR(idate) = 2015 and i.rid = r.rid  
GROUP BY r.county, r.cuisine  
ORDER BY r.county, r.cuisine
```

#For the last column

```
SELECT r.county AS County, r.cuisine AS Cuisine, COUNT(*)  
FROM restaurant AS r, inspection AS i  
WHERE MONTH(idate) = 7 and YEAR(idate) = 2015 and i.rid = r.rid and i.passfail = 'FAIL'  
GROUP BY r.county, r.cuisine
```

Way Two-----use php to realize calculation -----

```
SELECT COUNT( DISTINCT county ) AS numCounty  
FROM restaurant
```

```
SELECT COUNT( DISTINCT cuisine ) AS numCuisine  
FROM restaurant
```

```
SELECT DISTINCT county AS County  
FROM restaurant
```

```
SELECT DISTINCT cuisine AS Cuisine  
FROM restaurant
```

```
SELECT r.rid  
FROM restaurant AS r, inspection AS i  
WHERE r.rid = i.rid  
AND MONTH( i.idate ) = '$month'  
AND YEAR( i.idate ) = '$year'  
AND r.county = '$County'  
AND r.cuisine = '$Cuisine'
```

```
SELECT r.rid  
FROM restaurant AS r, inspection AS i  
WHERE r.rid = i.rid  
AND MONTH( i.idate ) = '$month'  
AND YEAR( i.idate ) = '$year'  
AND r.county = '$County'  
AND r.cuisine = '$Cuisine'  
AND i.passfail = 'FAIL'
```

7b Inspection Summary Report by Month for a specified Year/County

```
SELECT MONTH(i.idate) AS Month, COUNT(*)  
FROM restaurant AS r, inspection AS i  
WHERE YEAR(idate) = 2015 and r.county = 'Fulton' and i.rid = r.rid  
GROUP BY MONTH(i.idate)
```

Calculate the Grand Total

```
SELECT COUNT( * )  
FROM restaurant AS r, inspection AS i  
WHERE YEAR( idate ) = '$year'
```

```
AND r.county = '$County'
AND i.rid = r.rid
```

7c Inspection Summary Report for top Restaurant by Cuisine for a Year/County

```
SELECT r.cuisine AS cuisine, r.name AS name, CONCAT( r.street, " ", r.city, " ", r.state, " ", r.zipcode )
AS address, i.totalscore AS score
FROM restaurant AS r, inspection AS i, (
```

```
    SELECT cuisine, MAX( totalscore ) AS ma
    FROM inspection
    NATURAL JOIN restaurant
    WHERE YEAR( idate ) =2015
    AND county = 'Fulton'
    GROUP BY cuisine
)temp
WHERE YEAR( idate ) =2015
AND r.cuisine = temp.cuisine
AND county = 'Fulton'
AND i.rid = r.rid
AND temp.ma = i.totalscore
GROUP BY r.cuisine
ORDER BY r.cuisine
```

7d. Inspection Summary Report for Restaurants with Complaints

select the restaurant ID whose number of complaints \geq a specified number of complaints in a specified year. At the same time, their inspection score \leq a specified inspection score on their last inspection.

Return the Inspection Summary Report for Restaurants who meet the above criterion.

```
SELECT r.name, CONCAT( r.street, " ", r.city, " ", r.state, " ", r.zipcode ) AS address,
CONCAT( o.firstname, o.lastname ) AS operator, r.email as email, ii.totalscore as score,
COUNT( DISTINCT c.cdate)
FROM restaurant AS r, operatorowner AS o, complaint AS c, inspection AS ii
WHERE YEAR( cdate ) =2015
AND r.rid = c.rid
AND o.email = r.email
AND ii.rid = r.rid
AND r.rid
IN (

    SELECT rid
    FROM complaint
    GROUP BY rid
    HAVING COUNT( * ) >=1
)
AND (
```

```

    r.rid, ii.idate
)
IN (

    SELECT i.rid, i.idate
    FROM inspection AS i
    NATURAL JOIN (

        SELECT rid, MAX( idate ) idate
        FROM inspection
        GROUP BY rid
    )imaxdate
    WHERE i.totalscore <=84
)
AND (
    r.rid, ii.idate
)
IN (

```

```

    SELECT c.rid, c.idate
    FROM `contains` AS c
    NATURAL JOIN (

        SELECT rid, MAX( idate ) idate
        FROM `contains`
        GROUP BY rid
    )imaxdate
    WHERE c.itemnum <9
    AND c.score <9
)
GROUP BY r.name

```

Return the detailed complaints.

```

SELECT r.name, c.description
FROM restaurant AS r, operatorowner AS o, complaint AS c, inspection AS ii
WHERE YEAR( cdate ) =2015
AND r.rid = c.rid
AND o.email = r.email
AND ii.rid = r.rid
AND r.rid
IN (

```

```

    SELECT rid
    FROM complaint
    GROUP BY rid
    HAVING COUNT( * ) >=1
)
AND (

```



```

    r.rid, ii.idate
)
IN (

    SELECT i.rid, i.idate
    FROM inspection AS i
    NATURAL JOIN (

        SELECT rid, MAX( idate ) idate
        FROM inspection
        GROUP BY rid
    )imaxdate
    WHERE i.totalscore <=84
)
AND (
    r.rid, ii.idate
)
IN (

    SELECT c.rid, c.idate
    FROM `contains` AS c
    NATURAL JOIN (

        SELECT rid, MAX( idate ) idate
        FROM `contains`
        GROUP BY rid
    )imaxdate
    WHERE c.itemnum <9
    AND c.score <9
)
GROUP BY c.description

```