

Analysis of Restaurant Visits

Shital Dilip Dere

##Connecting database

```
library(RMySQL)
```

Loading required package: DBI

```
db_user <- 'sql9623315'           # use your value from the setup
db_password <- '6PHeg5saHJ'      # use your value from the setup
db_name <- 'sql9623315'          # use your value from the setup
db_host <- 'sql9.freemysqlhosting.net' # for db4free.net
db_port <- 3306
```

3. Connect to remote server database

```
mydb <- dbConnect(MySQL(), user = db_user, password = db_password,
                  dbname = db_name, host = db_host, port = db_port)
```

Executive Summary

Data

```
query <- "select r.name as restaurant_name, count(*) as numOfVisits, sum(`num.guests`) as totalGuests, `year`
from visits v
inner join restaurants r on r.rid = v.rid
inner join restaurant_facts f on r.rid = f.rid
group by r.rid, YEAR(v.vdate)
order by year;"
```

Execute the SQL query and store the result in a data frame

```
result <- dbGetQuery(mydb, query)
```

```
## Warning in .local(conn, statement, ...): Decimal MySQL column 2 imported as
## numeric
```

```
print("Displaying a table containing the number of visits and number of guests per restaurant")
```

```
## [1] "Displaying a table containing the number of visits and number of guests per restaurant"
```

```
print(result)
```

```
##      restaurant_name numOfVisits totalGuests year
## 1      Ninita          198          552 2022
## 2      Olga's          198          459 2022
## 3 Charlestown Brewery Pub      207          525 2022
## 4      Ninita         1302         3210 2023
## 5      Olga's         1137         2724 2023
## 6 Charlestown Brewery Pub     1236         3108 2023
## 7      Ninita           84          210 2024
## 8      Olga's           66          159 2024
## 9 Charlestown Brewery Pub      72          165 2024
```

Discussion

```
query <- "SELECT r.name AS restaurant_name
FROM visits v
INNER JOIN restaurants r ON r.rid = v.rid
GROUP BY r.rid
HAVING COUNT(*) = (
  SELECT MAX(numOfVisits)
  FROM (
    SELECT COUNT(*) AS numOfVisits
    FROM visits
    GROUP BY rid
  ) AS subquery
);"

result <- dbGetQuery(mydb, query)
print(result)
```

```
##      restaurant_name
## 1      Ninita
```

had the most overall visits,while

```
SELECT r.name
FROM restaurant_facts f
INNER JOIN restaurants r ON r.rid = f.rid
GROUP BY r.name
HAVING SUM(f.numGuests) = (
  SELECT MAX(totalGuests)
  FROM (
    SELECT SUM(numGuests) AS totalGuests
    FROM restaurant_facts
    GROUP BY rid
  ) AS subquery
)
```

Table 1: 1 records

<u>name</u>
Ninita

had the most guests.

```
SELECT YEAR(v.vdate) AS year
FROM visits v
GROUP BY YEAR(v.vdate)
HAVING COUNT(*) = (
    SELECT MAX(numOfVisits)
    FROM (
        SELECT COUNT(*) AS numOfVisits
        FROM visits
        GROUP BY YEAR(vdate)
    ) AS subquery
)
```

Table 2: 1 records

<u>year</u>
2023

was the year where we saw the most visits to our restaurants.