Database Creation

Database "fooddemand" is created and all processed data files are loaded into the database. For this, PostgreSQL is used.

In [2]:
```
# Import libraries

import psycopg2
import pandas as pd
```

In [17]:
```
# Establish a connection to the Postgres database
conn = psycopg2.connect(
host="localhost",
database="fooddemand",
user="mahesh",
password="secret"
)
```

In [18]:
```
# Check connection
print(conn)
```

```
<connection object at 0x7f1b49bc1a40; dsn: 'user=mahesh password=xxx dbname=fooddemand h
ost=localhost', closed: 0>
```

In [19]:
```
# Create Cursor
mycursor = conn.cursor()
```

In [6]:
```
# Create new table FulfilmentCenterInfo

mycursor.execute("""CREATE TABLE FulfilmentCenterInfo (center_id INT, city_code INT, \
                region_code INT, center_type VARCHAR, op_area FLOAT)""")
```

In [7]:
```
# Create new table MealInfo

mycursor.execute("""CREATE TABLE MealInfo (meal_id INT, category VARCHAR, cuisine VARCHA
```

In [8]:
```
# Create new table Train

mycursor.execute("""CREATE TABLE Train (id INT, week INT, center_id INT, meal_id INT, ch
                base_price FLOAT, emailer_for_promotion INT, homepage_featured INT, num_
```

In [9]:
```
# Create new table Test

mycursor.execute("""CREATE TABLE Test (id INT, week INT, center_id INT, meal_id INT, che
                base_price FLOAT, emailer_for_promotion INT, homepage_featured INT)""")
```

In [11]:
```
# Inserting data into FulfilmentCenterInfo table group
with open('../fulfilment_center_info.csv', 'r') as file:
    print(file)
    # Build the SQL statement to copy data from the CSV file into the table
    sql = f"COPY FulfilmentCenterInfo FROM STDIN WITH (FORMAT csv, HEADER true, DELIMITE
    # Execute the SQL statement
    mycursor.copy_expert(sql, file)
    # Commit the changes
    conn.commit()
```

```
<_io.TextIOWrapper name='../fulfilment_center_info.csv' mode='r' encoding='UTF-8'>
```

In [12]:
```
# Inserting data into MealInfo table group
```

```
with open('../meal_info.csv', 'r') as file:
    print(file)
    # Build the SQL statement to copy data from the CSV file into the table
    sql = f"COPY MealInfo FROM STDIN WITH (FORMAT csv, HEADER true, DELIMITER ',')"
    # Execute the SQL statement
    mycursor.copy_expert(sql, file)
    # Commit the changes
    conn.commit()
```

In [13]:
```
# Inserting data into Train table group
with open('../train.csv', 'r') as file:
    print(file)
    # Build the SQL statement to copy data from the CSV file into the table
    sql = f"COPY Train FROM STDIN WITH (FORMAT csv, HEADER true, DELIMITER ',')"
    # Execute the SQL statement
    mycursor.copy_expert(sql, file)
    # Commit the changes
    conn.commit()
```

```
<_io.TextIOWrapper name='../train.csv' mode='r' encoding='UTF-8'>
```

In [20]:
```
# Inserting data into Test table group
with open('../test.csv', 'r') as file:
    print(file)
    # Build the SQL statement to copy data from the CSV file into the table
    sql = f"COPY Test FROM STDIN WITH (FORMAT csv, HEADER true, DELIMITER ',')"
    # Execute the SQL statement
    mycursor.copy_expert(sql, file)
    # Commit the changes
    conn.commit()
```

```
<_io.TextIOWrapper name='../test.csv' mode='r' encoding='UTF-8'>
```

In [21]:
```
# Close the cursor and the connection
mycursor.close()
conn.commit()
```

In [ ]:
```
```