

## Motor, Chandrahas A20523718

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### Experiment -1 (EDGEQL)

**Requirement -1** : It doesn't generate any output in the ipynb file i.e. in the script. Rather it builds all the relation and stores data into the db.

**Requirement - 2** : Write and execute an EdgeQL/Python code to retrieve all businesses with 5 stars from Yelp Graph-Relational Data Model you created in **Requirement 1**

**Output :**

Miro Statue  
Sushi Dokku  
Mindworks  
Yelp Elite Battle Of The Band T's @ RAISED Urban Rooftop Bar  
Bhoomi Modern Indian Grill  
Feed Your Head  
The Flamingo By Alexander Calder  
Bereket Turkish Mediterranean Restaurant  
LaShuk Street Food  
Happy Monday Coffee - Loop  
Picasso Statue  
State Street, That Great Street  
Cascade Park  
Ron Christian  
Marshall Field and Company Building  
7-Eleven  
Pedal-Powered Produce Party  
Espresso and Milk  
Wabash Arts Corridor  
Chicago Skyline  
Stivers Coffee  
Museum Campus  
Chi Yatai  
Theme House  
J's Snack House  
Canal Street Eatery & Market  
Momentum Coffee  
Nine Bar  
MiMi's Tacos and French Fries  
Lake Front Path Sledding Hill  
Valhalla  
The Embassy Public House  
Quesadilla Pilsen

Quesabirria Jalisco  
Sabores De Michoacán  
Poke Poké  
Taylor Street Tap  
Little Joe's  
Chocolat Uzma  
Skinner Park  
Cake Sweet Food Chicago  
Gathers Tea Bar  
uncooked  
Sushi by Bou - West Loop  
Fiesta Tamaleria Del Barrio  
Chato's Pasta House  
pig & fire  
Laos To Your House  
Muse Coffee Studio  
Luna Llena Apothecary  
D's Roti & Trini Cuisine  
La Malinche Coffee & Tea House  
Aloha Wagon  
Five Squared Pizza  
Masa Madre  
Beyond Rice  
Bartleby's Ice Cream Cakes  
Taco Loco Of Pilsen  
Carniceria Maribel  
Typica Diner & Cafe Taylor St  
Boba Plug's Teahouse  
Nia Drink & Dessert  
BULSHO restaurant  
Crumbl Cookies - Lincoln Park  
BamBooQue  
Kuma San Japanese Restaurant  
Architectural Artifacts  
Baba Pita  
Ludlow Charlingtons Coffee Shop  
3 Little Pigs Chi  
Red Light Chicken  
2AM Izakaya  
Pretty Cool Ice Cream  
Olor Coffee  
Cedar Palace  
Lincoln Park Chess Pavilion  
Adams Playground Park  
Bridge Over Lincoln Park Zoo's South Pond  
EuroAsia Restaurant

Loud Mouth Food Bikes  
Bunker  
North Pond Nature Sanctuary  
Crepe Twist  
Ringo  
Naudi Signature Pizza  
Emeche Cakery & Cafe  
River Esplanade Park  
Junebug Cafe  
Pioneer Court  
Centennial Fountain and Water Arc  
Lakefront Trail  
The Luminary Cafe & Bar  
Justice of the Pies  
The Gentlemen Statues  
Farmer's Fridge  
Porter's Steakhouse  
Bianca's BBQ  
Keadkao Express  
Occupy Chicago  
Flash UYE: Chicago Cultural Center  
The Flight of Daedalus and Icarus By Roger Brown 1991  
Wolverine Trading Kitchen  
Louise Nevelson's Dawn Shadows  
Project Windows Design Contest  
Bagels Time  
National Restaurant Association  
Dunkin'  
Salads UP  
Cupcakes & Cocktails  
Friends Sushi  
TourBound Golf Academy  
300 S Wacker  
Maharaj Indian Grill  
Roosevelt Park  
Hunan Bistro  
Mary Richardson Jones Park  
The Arena Club at Soldier Field  
Gold Star Family Memorial Park  
Paleteria Los Magos  
Soul Full Chicago  
Mandala Cafe  
Sunny & Fine's Breakfast Burritos  
Taqueria Ofrenda  
Holy Grounds at St. Paul Catholic Church  
Bernard's

Chickpea  
Kitchen Keto  
Masala Pizza Company  
Starbucks Pickup  
Chicago French Press  
Talbott Cucina  
Mariposa  
The Paul and Gabriella Rosenbaum Garden  
Te'amo Boba Bar  
Bar on 4  
Bar 75  
Chicago Butter Cookies  
Movie Mondays at the Drake's Palm Court  
Protein Bar & Kitchen  
Rapt on the Mile  
Cochon 555  
Jane M. Byrne Plaza  
Field Museum Dig Site  
Chez Paul  
Ciccio  
The Bistro  
Peacock Lounge  
Edison's Corner  
Ineeka  
Doll's Kitchen And Catering  
Cuisines by Sammy  
Chicago Artizen  
The Club house  
Zarsh Restaurant  
Liberation Kitchen  
Desi Chops  
Haute Diggity Dawgs Restaurant  
Livingston Park  
Ida's Artisan Ice Cream & Treats  
All Rise Brewing Company  
tea hot coffee  
FanDuel  
Farmer's Fridge  
Multilevel Streets of Chicago  
Surprise Oprah! A Farewell Spectacular  
Atkins Medicinal Plant Garden  
Uni Uni Tea - Lincoln Park  
The Green  
Fons Empanadas  
KALA Modern Greek  
Lakeview Smoke Shop

bahn mi city

**Requirement 3 :** Write and excute an EdgeQL/Python code to retrieve all businesses that offer **Chicago Pizza Style** in Zip-Code 60601 from Yelp Graph-Relational Data Model you created in **Requirement 1**

**Output:**

Millennium Hall  
Paisans Pizzeria  
Five Squared Pizza  
Naudi Signature Pizza  
Robert's Pizza and Dough  
Bongiorno's Italian Deli & Pizzeria  
Giordano's - Jackson  
Giordano's  
Exchequer Restaurant & Pub  
The Florentine  
Bureau Pizza  
Fontano's  
Reggie's Pizza Express  
Pat's Pizzeria  
Luke's Italian Beef  
Gino's East - South Loop  
Pizano's Pizza  
Blaze Pizza  
Pizza Beer & Jukebox  
Bonci  
Eataly Chicago  
Giordano's - Navy Pier  
Coco Pazzo Cafe  
The Water Hole Chicago  
Pompei

**Requirement -4:** Write and excute an EdgeQL/Python code to retrieve top (highest count of reviews) 5 businesses that offer **Chicago Hot Dogs** in Zip-Code 60605 from Yelp Graph-Relational Data Model you created in **Requirement 1**

**Output:**

Jim's Original  
Kim & Carlo's Hot Dog Stand  
Lulu's Hot Dogs  
Express Grill  
Kong Dog

**Requirement -5: Write and excute an EdgeQL/Python code to print the 3 reviews of the top (highest count of reviews) 3 businesses that offer Steak in Zip-Code 60611 from Yelp Graph-Relational Data Model you created in Requirement 1**

**Output:**

Joe's Seafood, Prime Steak & Stone Crab  
Joe's Seafood, Prime Steak & Stone Crab  
Prime & Provisions  
Prime & Provisions  
Prime & Provisions  
Michael Jordan's Steak House  
Michael Jordan's Steak House  
Hugo's Frog Bar & Fish House  
Hugo's Frog Bar & Fish House

**Requirement -6: Write and excute an EdgeQL/Python code to retrieve top (highest count of reviews) 5 businesses that offer Hot Dogs in Community Area Lincoln Park from Yelp Graph-Relational Data Model you created in Requirement 1**

**Output:**

Annette's Italian Ice  
Jeni's Splendid Ice Creams  
Terry's Toffee  
Crepe Twist  
Pretty Cool Ice Cream

**Requirement -7: Write and execute an EdgeQL/Python code to print the 3 reviews of the top (highest count of reviews) 3 businesses that offer Steak in Community Area Chicago from Yelp Graph-Relational Data Model you created in Requirement 1**

**Output:**

Prime & Provisions  
Ocean Prime  
Grill on 21  
Ocean Prime  
Joe's Seafood, Prime Steak & Stone Crab  
The Capital Grille  
Eddie V's Prime Seafood  
Prime & Provisions  
Steak 48  
Remington's  
Grill on 21  
Morton's The Steakhouse  
Bazaar Meat by José Andrés  
The Grillroom Chophouse & Wine Bar  
The X Pot

RL Restaurant  
Carson's  
Rosebud Steakhouse  
Torali  
Hugo's Frog Bar & Fish House  
Stetsons Modern Steak + Sushi  
Bistronomic  
Michael Jordan's Steak House  
Ocean Prime  
Joe's Seafood, Prime Steak & Stone Crab  
The Capital Grille  
Eddie V's Prime Seafood  
Prime & Provisions  
Steak 48  
Remington's  
Grill on 21  
Morton's The Steakhouse  
Bazaar Meat by José Andrés  
The Grillroom Chophouse & Wine Bar  
The X Pot  
RL Restaurant  
Carson's  
Rosebud Steakhouse  
Torali  
Hugo's Frog Bar & Fish House  
Stetsons Modern Steak + Sushi  
Bistronomic  
Michael Jordan's Steak House

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## Experiment -2 (GRAPHQL)

**Requirement -1:** This doesn't give any output in the ipynb file. It helps in storing the data with the help of given graphql queries into the db.

### Requirement -2:

#### Output:

```
{"data":{"Business": [{"name": "Miro Statue"}, {"name": "Sushi Dokku"}, {"name": "Mindworks"}, {"name": "Yelp Elite Battle Of The Band T's @ RAISED Urban Rooftop Bar"}, {"name": "Bhoomi Modern Indian Grill"}, {"name": "Feed Your Head"}, {"name": "The Flamingo By Alexander Calder"}, {"name": "Bereket Turkish Mediterranean Restaurant"}, {"name": "LaShuk Street Food"}, {"name": "Happy Monday Coffee - Loop"}, {"name": "Picasso Statue"}, {"name": "State Street, That Great Street"}, {"name": "Cascade Park"}, {"name": "Ron Christian"}, {"name": "Marshall Field and Company Building"}, {"name": "7-Eleven"}, {"name": "Pedal-Powered Produce Party"}, {"name": "Espresso and Milk"}, {"name": "Wabash Arts Corridor"}, {"name": "Chicago"}
```

Skyline"}, {"name": "Stivers Coffee"}, {"name": "Museum Campus"}, {"name": "Chi Yatai"}, {"name": "Theme House"}, {"name": "J's Snack House"}, {"name": "Canal Street Eatery & Market"}, {"name": "Momentum Coffee"}, {"name": "Nine Bar"}, {"name": "MiMi's Tacos and French Fries"}, {"name": "Lake Front Path Sledding Hill"}, {"name": "Valhalla"}, {"name": "The Embassy Public House"}, {"name": "Quesadilla Pilsen"}, {"name": "Quesabirria Jalisco"}, {"name": "Sabores De Michoacán"}, {"name": "Poke Poké"}, {"name": "Taylor Street Tap"}, {"name": "Little Joe's"}, {"name": "Chocolat Uzma"}, {"name": "Skinner Park"}, {"name": "Cake Sweet Food Chicago"}, {"name": "Gathers Tea Bar"}, {"name": "uncooked"}, {"name": "Sushi by Bou - West Loop"}, {"name": "Fiesta Tamaleria Del Barrio"}, {"name": "Chato's Pasta House"}, {"name": "pig & fire"}, {"name": "Laos To Your House"}, {"name": "Muse Coffee Studio"}, {"name": "Luna Llena Apothecary"}, {"name": "D's Roti & Trini Cuisine"}, {"name": "La Malinche Coffee & Tea House"}, {"name": "Aloha Wagon"}, {"name": "Five Squared Pizza"}, {"name": "Masa Madre"}, {"name": "Beyond Rice"}, {"name": "Bartleby's Ice Cream Cakes"}, {"name": "Taco Loco Of Pilsen"}, {"name": "Carniceria Maribel"}, {"name": "Typica Diner & Cafe Taylor St"}, {"name": "Boba Plug's Teahouse"}, {"name": "Nia Drink & Dessert"}, {"name": "BULSHO restaurant"}, {"name": "Crumbl Cookies - Lincoln Park"}, {"name": "BamBooQue"}, {"name": "Kuma San Japanese Restaurant"}, {"name": "Architectural Artifacts"}, {"name": "Baba Pita"}, {"name": "Ludlow Charlingtons Coffee Shop"}, {"name": "3 Little Pigs Chi"}, {"name": "Red Light Chicken"}, {"name": "2AM Izakaya"}, {"name": "Pretty Cool Ice Cream"}, {"name": "Olor Coffee"}, {"name": "Cedar Palace"}, {"name": "Lincoln Park Chess Pavilion"}, {"name": "Adams Playground Park"}, {"name": "Bridge Over Lincoln Park Zoo's South Pond"}, {"name": "EuroAsia Restaurant"}, {"name": "Loud Mouth Food Bikes"}, {"name": "Bunker"}, {"name": "North Pond Nature Sanctuary"}, {"name": "Crepe Twist"}, {"name": "Ringo"}, {"name": "Naudi Signature Pizza"}, {"name": "Emeche Cakery & Cafe"}, {"name": "River Esplanade Park"}, {"name": "Junebug Cafe"}, {"name": "Pioneer Court"}, {"name": "Centennial Fountain and Water Arc"}, {"name": "Lakefront Trail"}, {"name": "The Luminary Cafe & Bar"}, {"name": "Justice of the Pies"}, {"name": "The Gentlemen Statues"}, {"name": "Farmer's Fridge"}, {"name": "Porter's Steakhouse"}, {"name": "Bianca's BBQ"}, {"name": "Keadkao Express"}, {"name": "Occupy Chicago"}, {"name": "Flash UYE: Chicago Cultural Center"}, {"name": "The Flight of Daedalus and Icarus By Roger Brown 1991"}, {"name": "Wolverine Trading Kitchen"}, {"name": "Louise Nevelson's Dawn Shadows"}, {"name": "Project Windows Design Contest"}, {"name": "Bagels Time"}, {"name": "National Restaurant Association"}, {"name": "Dunkin'"}, {"name": "Salads UP"}, {"name": "Cupcakes & Cocktails"}, {"name": "Friends Sushi"}, {"name": "TourBound Golf Academy"}, {"name": "300 S Wacker"}, {"name": "Maharaj Indian Grill"}, {"name": "Roosevelt Park"}, {"name": "Hunan Bistro"}, {"name": "Mary Richardson Jones Park"}, {"name": "The Arena Club at Soldier Field"}, {"name": "Gold Star Family Memorial Park"}, {"name": "Paleteria Los Magos"}, {"name": "Soul Full Chicago"}, {"name": "Mandala Cafe"}, {"name": "Sunny & Fine's Breakfast Burritos"}, {"name": "Taqueria Ofrenda"}, {"name": "Holy Grounds at St. Paul Catholic Church"}, {"name": "Bernard's"}, {"name": "Chickpea"}, {"name": "Kitchen Keto"}, {"name": "Masala Pizza Company"}, {"name": "Starbucks Pickup"}, {"name": "Chicago French Press"}, {"name": "Talbot Cucina"}, {"name": "Mariposa"}, {"name": "The Paul and Gabriella Rosenbaum Garden"}, {"name": "Te'amo Boba Bar"}, {"name": "Bar on 4"}, {"name": "Bar 75"}, {"name": "Chicago Butter Cookies"}, {"name": "Movie Mondays at the Drake's Palm Court"}, {"name": "Protein Bar & Kitchen"}, {"name": "Rapt on the Mile"}, {"name": "Cochon 555"}, {"name": "Jane M. Byrne Plaza"}, {"name": "Field Museum Dig Site"}, {"name": "Chez Paul"}, {"name": "Ciccio"}, {"name": "The Bistro"}, {"name": "Peacock Lounge"}, {"name": "Edison's Corner"}, {"name": "Ineeka"}, {"name": "Doll's Kitchen And Catering"}, {"name": "Cuisines by



Sammy"}, {"name": "Chicago Artizen"}, {"name": "The Club house"}, {"name": "Zarsh Restaurant"}, {"name": "Liberation Kitchen"}, {"name": "Desi Chops"}, {"name": "Haute Diggity Dawgs Restaurant"}, {"name": "Livingston Park"}, {"name": "Ida's Artisan Ice Cream & Treats"}, {"name": "All Rise Brewing Company"}, {"name": "tea hot coffee"}, {"name": "FanDuel"}, {"name": "Farmer's Fridge"}, {"name": "Multilevel Streets of Chicago"}, {"name": "Surprise Oprah! A Farewell Spectacular"}, {"name": "Atkins Medicinal Plant Garden"}, {"name": "Uni Uni Tea - Lincoln Park"}, {"name": "The Green"}, {"name": "Fons Empanadas"}, {"name": "KALA Modern Greek"}, {"name": "Lakeview Smoke Shop"}]}}

### **Requirement -3:**

#### **Output:**

{"data":{"Business": [{"name": "Giordano's - Jackson"}, {"name": "Luke's Italian Beef"}]}}

### **Requirement -4:**

#### **Output:**

{"data":{"Business": [{"name": "Relish Chicago Hot Dogs"}, {"name": "The Hot Dog Box"}, {"name": "Ssong's Hotdog - Chicago"}, {"name": "Relish Chicago Hot Dogs"}, {"name": "The Northman Beer & Cider Garden Riverwalk"}]}}

### **Requirement -5:**

#### **Output:**

{"data":{"Review": [{"review": "Prime & Provisions"}, {"review": "Ocean Prime"}, {"review": "Grill on 21"}, {"review": "Ocean Prime"}, {"review": "Joe's Seafood, Prime Steak & Stone Crab"}, {"review": "The Capital Grille"}, {"review": "Eddie V's Prime Seafood"}, {"review": "Prime & Provisions"}, {"review": "Steak 48"}]}}

### **Requirement -6:**

#### **Output:**

{"data":{"Business": [{"name": "Crumbl Cookies - Lincoln Park"}, {"name": "Pretty Cool Ice Cream"}, {"name": "Terry's Toffee"}, {"name": "Crepe Twist"}, {"name": "Jeni's Splendid Ice Creams"}]}}

### **Requirement -7:**

#### **Output:**

{"data":{"Review": [{"review": "Prime & Provisions"}, {"review": "Ocean Prime"}, {"review": "Grill on 21"}, {"review": "Ocean Prime"}, {"review": "Joe's Seafood, Prime Steak & Stone Crab"}, {"review": "The Capital Grille"}, {"review": "Eddie V's Prime Seafood"}, {"review": "Prime & Provisions"}, {"review": "Steak 48"}, {"review": "Remington's"}, {"review": "Grill on 21"}, {"review": "Morton's The Steakhouse"}, {"review": "Bazaar Meat by José Andrés"}, {"review": "The Grillroom Chophouse & Wine Bar"}, {"review": "The X Pot"}, {"review": "RL Restaurant"}, {"review": "Carson's"}, {"review": "Rosebud Steakhouse"}, {"review": "Torali"}, {"review": "Hugo's Frog Bar & Fish House"}, {"review": "Stetsons Modern Steak + Sushi"}, {"review": "Bistronomic"}, {"review": "Michael Jordan's Steak House"}, {"review": "Ocean Prime"}, {"review": "Joe's Seafood, Prime Steak & Stone Crab"}, {"review": "The Capital Grille"}, {"review": "Eddie V's Prime Seafood"}, {"review": "Prime & Provisions"}, {"review": "Steak 48"}, {"review": "Remington's"}, {"review": "Grill on 21"}, {"review": "Morton's The Steakhouse"}, {"review": "Bazaar Meat by José Andrés"}, {"review": "The Capital Grille"}]}}

"The Grillroom Chophouse & Wine Bar"}, {"review" : "The X Pot"}, {"review" : "RL Restaurant"}, {"review" : "Carson's"}, {"review" : "Rosebud Steakhouse"}, {"review" : "Torali"}, {"review" : "Hugo's Frog Bar & Fish House"}, {"review" : "Stetsons Modern Steak + Sushi"}, {"review" : "Bistronomic"}, {"review" : "Michael Jordan's Steak House"}] ] ] }

The comparative analysis table:

Write a report for the Comparative Analysis of the Experimental Results

- Complete the table below by calculating the time it took to execute every requirement in every experiment
- The numbers provided below are for illustration purposes only

Requirement	Experiment #1	Experiment #2	Experiment #3	Experiment #4	Experiment #5
#1	4 mins 5 secs	6 mins 10 secs			
#2	14 milliseconds	18 milliseconds			
#3	48 milliseconds	54 milliseconds			
#4	24 milliseconds	26 milliseconds			
#5	17 milliseconds	20 milliseconds			
#6	11 milliseconds	11 milliseconds			
#7	38 milliseconds	40 milliseconds			