

Untitled

June 2, 2025

```
[17]: from pymongo import MongoClient
import json
import os
from datetime import datetime
```

```
[6]: data_path = "/home/jovyan/data/restaurants.json"
```

```
[7]: data = []
with open(data_path, encoding='utf-8') as f:
    for line in f:
        try:
            data.append(json.loads(line))
        except json.JSONDecodeError as e:
            print("Skipping invalid line:", e)

print(f" Loaded {len(data)} records from JSON file")
```

Loaded 3772 records from JSON file

```
[8]: client = MongoClient("mongodb://mongodb:27017/")
```

```
[9]: db = client["restaurantdb"]
collection = db["restaurants"]
```

```
[10]: collection.delete_many({}) #to delete pervious data
```

```
[10]: DeleteResult({'n': 3772, 'ok': 1.0}, acknowledged=True)
```

```
[11]: if data:
    collection.insert_many(data)
    print(" Data successfully inserted into MongoDB!")
```

Data successfully inserted into MongoDB!

```
[14]: print("Sample documents from MongoDB:")
for doc in collection.find().limit(2):
    print(doc)
```

Sample documents from MongoDB:

```
{'_id': ObjectId('683d8f31678f39fb4e4e0aef'), 'address': {'building': '1007',  
'coord': [-73.856077, 40.848447], 'street': 'Morris Park Ave', 'zipcode':  
'10462'}, 'borough': 'Bronx', 'cuisine': 'Bakery', 'grades': [{'date': {'$date':  
1393804800000}, 'grade': 'A', 'score': 2}, {'date': {'$date': 1378857600000},  
'grade': 'A', 'score': 6}, {'date': {'$date': 1358985600000}, 'grade': 'A',  
'score': 10}, {'date': {'$date': 1322006400000}, 'grade': 'A', 'score': 9},  
{ 'date': {'$date': 1299715200000}, 'grade': 'B', 'score': 14}], 'name': 'Morris  
Park Bake Shop', 'restaurant_id': '30075445'}  
{'_id': ObjectId('683d8f31678f39fb4e4e0af0'), 'address': {'building': '469',  
'coord': [-73.961704, 40.662942], 'street': 'Flatbush Avenue', 'zipcode':  
'11225'}, 'borough': 'Brooklyn', 'cuisine': 'Hamburgers', 'grades': [{'date':  
{ '$date': 1419897600000}, 'grade': 'A', 'score': 8}, {'date': {'$date':  
1404172800000}, 'grade': 'B', 'score': 23}, {'date': {'$date': 1367280000000},  
'grade': 'A', 'score': 12}, {'date': {'$date': 1336435200000}, 'grade': 'A',  
'score': 12}], 'name': 'Wendy'S', 'restaurant_id': '30112340'}
```

```
[18]: # Create a new mock restaurant document  
new_restaurant = {  
    "name": "Indian Pizzeria",  
    "borough": "Brooklyn",  
    "cuisine": "Pizza",  
    "address": {  
        "building": "42",  
        "street": "Indian Mock Street",  
        "zipcode": "11201"  
    },  
    "grades": [  
        {"grade": "A", "score": 8, "date": datetime(2024, 1, 15)},  
        {"grade": "B", "score": 12, "date": datetime(2023, 10, 10)}  
    ],  
    "restaurant_id": "99999999"  
}  
  
# Insert the document  
result = collection.insert_one(new_restaurant)  
  
print(f"Inserted document ID: {result.inserted_id}")
```

Inserted document ID: 683d935d678f39fb4e4e19ab

```
[19]: #Total Restaurants  
  
total_restaurants = collection.count_documents({})  
print(f"Total number of restaurants: {total_restaurants}")
```

Total number of restaurants: 3773

```
[21]: # Find all restaurants where borough is "Bronx"
       bronx_restaurants = collection.find({"borough": "Bronx"})
       for restaurant in bronx_restaurants:
           name = restaurant.get("name", "N/A")
           address = restaurant.get("address", {})
           street = address.get("street", "N/A")
           building = address.get("building", "N/A")
           zipcode = address.get("zipcode", "N/A")
           print(f"Name: {name}, Address: {building} {street}, Zipcode: {zipcode}")
```

Name: Morris Park Bake Shop, Address: 1007 Morris Park Ave, Zipcode: 10462
 Name: Wild Asia, Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: Carvel Ice Cream, Address: 1006 East 233 Street, Zipcode: 10466
 Name: Happy Garden, Address: 1236 238 Spofford Ave, Zipcode: 10474
 Name: Happy Garden, Address: 277 East Kingsbridge Road, Zipcode: 10458
 Name: Manhem Club, Address: 658 Clarence Ave, Zipcode: 10465
 Name: The New Starling Athletic Club Of The Bronx, Address: 2222 Haviland Avenue, Zipcode: 10462
 Name: Yankee Tavern, Address: 72 East 161 Street, Zipcode: 10451
 Name: Mcdwyers Pub, Address: 331 East 204 Street, Zipcode: 10467
 Name: The Punch Bowl, Address: 5820 Broadway, Zipcode: 10463
 Name: Munchtime, Address: 21 East 170 Street, Zipcode: 10452
 Name: Ihop, Address: 4340 Boston Road, Zipcode: 10475
 Name: Lulu'S Coffee Shop, Address: 1191 Castle Hill Avenue, Zipcode: 10462
 Name: Marina Delray, Address: 2894 Schurz Ave, Zipcode: 10465
 Name: The Lark'S Nest, Address: 4280 Katonah Ave, Zipcode: 10470
 Name: Terrace Cafe, Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: African Terrace, Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: Cool Zone, Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: Beaver Pond, Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: African Market (Baboon Cafe), Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: Blue Bay Restaurant, Address: 3533 Johnson Avenue, Zipcode: 10463
 Name: Seashore Restaurant, Address: 591 City Island Ave, Zipcode: 10464
 Name: Bronx Grill, Address: 2375 East Tremont Avenue, Zipcode: 10462
 Name: Johnny'S Reef Restaurant, Address: 2 City Island Ave, Zipcode: 10464
 Name: White Castle, Address: 2701 Boston Post Road, Zipcode: 10467
 Name: P & K'S Grill, Address: 170 West 231 Street, Zipcode: 10463
 Name: Mcdonald'S, Address: 576581 Broadway, Zipcode: 10463
 Name: John Mulligan'S Fireside Pub, Address: 4272 Katonah Avenue, Zipcode: 10470
 Name: Mcdonald'S, Address: 3660 East Tremont Avenue, Zipcode: 10465
 Name: Yankee Jz Pizza, Address: 1599 Westchester Avenue, Zipcode: 10472
 Name: Ihop, Address: 5655 Broadway, Zipcode: 10463
 Name: Tony'S Pier Restaurant, Address: 1 City Island Ave, Zipcode: 10464
 Name: Quality Cafe & Restaurant, Address: 2942 Westchester Avenue, Zipcode: 10461
 Name: Sabrosura Restaurant, Address: 1200 Castle Hill Avenue, Zipcode: 10462

Name: Jp'S Waterside Restaurant, Address: 703 Minnieford Ave, Zipcode: 10464
 Name: John & Joe Pizzeria & Restaurant, Address: 749 Lydig Avenue, Zipcode: 10462
 Name: Tony'S Pizza, Address: 1014 Longwood Avenue, Zipcode: 10459
 Name: Dunkin' Donuts, Address: 4090 Boston Post Road, Zipcode: 10475
 Name: Aqueduct North, Address: 4277 Katonah Ave, Zipcode: 10470
 Name: Cuchifritos, Address: 158 E. 188 Th St, Zipcode: 10468
 Name: Riverdale Diner, Address: 3657 Kingsbridge Avenue, Zipcode: 10463
 Name: Castlehill Diner, Address: 1506 Bronxdale Avenue, Zipcode: 10462
 Name: Tommy'S Pizza, Address: 4033 East Tremont Avenue, Zipcode: 10465
 Name: Mom'S Fried Chicken, Address: 253 East 167 Street, Zipcode: 10456
 Name: Short Stop Restaurant, Address: 5977 Broadway, Zipcode: 10463
 Name: Burger Barn Restaurant, Address: 3092 White Plains Road, Zipcode: 10467
 Name: Eastwood Manor, Address: 3371 Eastchester Road, Zipcode: 10469
 Name: Ljubo'S Pizzeria, Address: 15 Westchester Square, Zipcode: 10461
 Name: Wendy'S, Address: 3636 Boston Road, Zipcode: 10469
 Name: Venice Pizza, Address: 1539 Unionport Road, Zipcode: 10462
 Name: Frank'S Soup Bowl, Address: 3580 Bronxwood Avenue, Zipcode: 10469
 Name: White Castle, Address: 1677 Bruckner Boulevard, Zipcode: 10472
 Name: White Castle, Address: 550 East Fordham Road, Zipcode: 10458
 Name: Arturo'S Pizza, Address: 5189A Broadway, Zipcode: 10463
 Name: Venice Restaurant, Address: 772 East 149 Street, Zipcode: 10455
 Name: Walnut Bus Stop, Address: 881 East 134 Street, Zipcode: 10454
 Name: Wendy'S, Address: 2140 Westchester Avenue, Zipcode: 10462
 Name: The Pizza Place, Address: 1665 Metropolitan Avenue, Zipcode: 10462
 Name: White Castle, Address: 3663 Boston Road, Zipcode: 10466
 Name: Isla Restaauraunt, Address: 510 Willis Avenue, Zipcode: 10455
 Name: Spoto'S Restaurant, Address: 4005 East Tremont Avenue, Zipcode: 10465
 Name: Bagel Cafe, Address: 2214 Bartow Ave, Zipcode: 10475
 Name: Vinny'S Famous Pizza, Address: 2119 Grand Concourse, Zipcode: 10453
 Name: Rino'S, Address: 3938 East Tremont Avenue, Zipcode: 10465
 Name: Villa Barone Manor, Address: 737 Throgs Neck Expressway, Zipcode: 10465
 Name: Loui Seafood, Address: 347478 East Tremont Avenue, Zipcode: 10465
 Name: Gleason'S Cafe, Address: 2040 Eastchester Road, Zipcode: 10461
 Name: Mcdonald'S, Address: 85 Bruckner Boulevard, Zipcode: 10454
 Name: Fordham Seafood And Chicken, Address: 2468 Grand Concourse, Zipcode: 10458
 Name: Gun Post Lanes Snack Bar, Address: 1215 East Gun Hill Road, Zipcode: 10469
 Name: El Molino Rojo Restaurant, Address: 101 East 161 Street, Zipcode: 10451
 Name: O'Brien'S Pub, Address: 28 East Kingsbridge Road, Zipcode: 10468
 Name: Tibbett Diner, Address: 3033 Tibbett Ave, Zipcode: 10463
 Name: E & L Bakery & Coffee Shop, Address: 4202 White Plains Road, Zipcode: 10466
 Name: Wembley Athletic Club, Address: 550 East 239 Street, Zipcode: 10470
 Name: Cullen'S Tavern, Address: 4340 White Plains Road, Zipcode: 10466
 Name: White Castle, Address: 2900 East Tremont Avenue, Zipcode: 10461
 Name: Mcdonald'S, Address: 300 East 204 Street, Zipcode: 10467
 Name: Golden Pizza, Address: 504 East 138 Street, Zipcode: 10454
 Name: Mcdonald'S, Address: 2516 White Plains Road, Zipcode: 10467

Name: Chick-N-Ribs, Address: 780 Morris Park Ave, Zipcode: 10462
 Name: Mcdonald'S, Address: 5167 East 161 Street, Zipcode: 10451
 Name: Pugsley Pizza, Address: 590 East 191 Street, Zipcode: 10458
 Name: White Castle, Address: 931 Westchester Avenue, Zipcode: 10459
 Name: Dominick'S Bar & Restaurant, Address: 2335 Arthur Avenue, Zipcode: 10458
 Name: Zaro'S Bread Basket, Address: 29 Hugh Grant Circle, Zipcode: 10462
 Name: La Lechonera Criolla, Address: 1709 Webster Avenue, Zipcode: 10457
 Name: Enzo Cafe, Address: 2339 Arthur Avenue, Zipcode: 10458
 Name: Joe'S Pizza, Address: 1858 Archer Street, Zipcode: 10460
 Name: Lolita'S Restaurant, Address: 356 East 148 Street, Zipcode: 10455
 Name: Mcdonald'S, Address: 599 Grand Concourse, Zipcode: 10451
 Name: Rolan Bagels, Address: 3601 Riverdale Avenue, Zipcode: 10463
 Name: Fordham Fried Chicken & Sea Food, Address: 161 East 188 Street, Zipcode: 10468
 Name: Celeste'S Snack Bar, Address: 2028 White Plains Road, Zipcode: 10462
 Name: Pelham Bay Diner, Address: 1920 East Gun Hill Road, Zipcode: 10469
 Name: Mcdonald'S, Address: 4174 White Plain Road, Zipcode: 10466
 Name: Villa Barone, Address: 3289 Westchester Avenue, Zipcode: 10461
 Name: Stuyvesant Yacht Club, Address: 10 Centre Street, Zipcode: 10464
 Name: Riverdale Yacht Club, Address: 800 West 254 Street & Hudson River, Zipcode: 10471
 Name: Ambassador Diner, Address: 730 Kelly Street, Zipcode: 10455
 Name: Bagel Corner, Address: 581 West 235 Street, Zipcode: 10463
 Name: Kingston Tropical Bakery, Address: 4000 White Plains Road, Zipcode: 10466
 Name: Concourse Jamaican Bakery, Address: 252 East 167 Street, Zipcode: 10456
 Name: Artuso Pastry Shop, Address: 670 East 187 Street, Zipcode: 10458
 Name: Champion Bakery, Address: 3978 White Plains Road, Zipcode: 10466
 Name: Al Cholo Bakery, Address: 3825 White Plains Road, Zipcode: 10467
 Name: Franco Bakery, Address: 527 East 138 Street, Zipcode: 10454
 Name: Biarritz Bakery, Address: 1015 East 167 Street, Zipcode: 10459
 Name: Jackie'S West Indian Bakery, Address: 1203 East 233 Street, Zipcode: 10466
 Name: El Vaquero Barras, Address: 2649 Webster Avenue, Zipcode: 10458
 Name: China Wok Ii, Address: 2459 Webster Avenue, Zipcode: 10458
 Name: Pitusa Bakery, Address: 831 East 149 Street, Zipcode: 10455
 Name: Woodlawn Cafe, Address: 3700 Jerome Avenue, Zipcode: 10467
 Name: White Castle, Address: 1831 Webster Avenue, Zipcode: 10457
 Name: Crown Diner, Address: 79 East 161 Street, Zipcode: 10451
 Name: Mcdonald'S, Address: 3440 Jerome Avenue, Zipcode: 10467
 Name: Artie'S, Address: 394 City Island Avenue, Zipcode: 10464
 Name: Crosstown Diner, Address: 2880 Bruckner Boulevard, Zipcode: 10465
 Name: Catania'S Pizza Cafe, Address: 2303 Arthur Avenue, Zipcode: 10458
 Name: Jimmy Ryan'S, Address: 3005 Middletown Road, Zipcode: 10461
 Name: Park Billiards, Address: 2020 White Plains Road, Zipcode: 10462
 Name: Mcdonald'S, Address: 130117 Castle Hill Avenue, Zipcode: 10462
 Name: Full Moon Pizza, Address: 600 East 187 Street, Zipcode: 10458
 Name: Capri Ii Pizza, Address: 149 Dreiser Loop, Zipcode: 10475
 Name: Dragon City, Address: 2102 Bartow Ave, Zipcode: 10475

Name: Nacional Bakery #1, Address: 1484 Westchester Avenue, Zipcode: 10472
 Name: New Pabellon De Oro Restaurant, Address: 1501 Westchester Avenue, Zipcode: 10472
 Name: Cosmos Restaurant, Address: 726 East Tremont Avenue, Zipcode: 10457
 Name: Bowler Land, Address: 2417 Hollers Avenue, Zipcode: 10475
 Name: Feeding Tree Style West Indian Restaurant, Address: 892 Gerard Avenue, Zipcode: 10452
 Name: Rio Cobre Restaurant, Address: 4850 Whiteplains Road, Zipcode: 10470
 Name: Pasta Pasta Restaurant, Address: 2023 Williamsbridge Road, Zipcode: 10461
 Name: Ray'S Pizza Restuarant, Address: 553 East 138 Street, Zipcode: 10454
 Name: Louie'Sdale Diner, Address: 189191 West 231 Street, Zipcode: 10463
 Name: Montezuma Restaurant, Address: 119 West Kingsbridge Road, Zipcode: 10468
 Name: Mcdonald'S, Address: 2170 White Plains Road, Zipcode: 10462
 Name: Carvel Ice Cream, Address: 1250 Castle Hill Ave, Zipcode: 10462
 Name: Hunan Balcony, Address: 3511 Johnson Avenue, Zipcode: 10463
 Name: Great Wall Restaurant, Address: 732 East 187 Street, Zipcode: 10458
 Name: Boston Market, Address: 337185 East Tremont Avenue, Zipcode: 10461
 Name: La Bella Rosa Bakery, Address: 605 East Tremont Avenue, Zipcode: 10457
 Name: Kennedy Fried Chicken, Address: 696 Allerton Avenue, Zipcode: 10467
 Name: La Isla Cuchifritos, Address: 15221524 Westchester Avenue, Zipcode: 10472
 Name: Keenans, Address: 5588 Broadway, Zipcode: 10463
 Name: Mcdonald'S, Address: 513 East 138 Street, Zipcode: 10454
 Name: Caridad Restaurant, Address: 410 East Tremont Avenue, Zipcode: 10457
 Name: Lena Restaurant, Address: 206 East 198 Street, Zipcode: 10458
 Name: La Perla Mexicana, Address: 281 East 149 Street, Zipcode: 10451
 Name: Sugar City Bakery, Address: 33083310 Whiteplains Road, Zipcode: 10467
 Name: Lopez'S Pizzeria And Coffee Shop, Address: 751 Westchester Avenue, Zipcode: 10455
 Name: Glen Roy Bar And Grill, Address: 145 East 149 Street, Zipcode: 10451
 Name: An Beal Bocht Cafe, Address: 445 West 238 Street, Zipcode: 10463
 Name: Diamante Poblano Restaurant, Address: 2431 Jerome Avenue, Zipcode: 10468
 Name: Archer Sports Bar, Address: 1511 White Plains Road, Zipcode: 10462
 Name: Lucky House Restaurant, Address: 202 East 167 Street, Zipcode: 10456
 Name: Shamrock Inn, Address: 1729 Crosby Avenue, Zipcode: 10461
 Name: New Wah Kitchen, Address: 1474 Westchester Avenue, Zipcode: 10472
 Name: Crab Shanty, Address: 361 City Island Ave, Zipcode: 10464
 Name: Throgs Neck Clipper, Address: 3599 East Tremont Avenue, Zipcode: 10465
 Name: Cafe Lou'S, Address: 3060 Boston Road, Zipcode: 10469
 Name: Barries Restaurant, Address: 707 East 235 Street, Zipcode: 10466
 Name: Giralda Bakery, Address: 1035 East 163 Street, Zipcode: 10459
 Name: New Capital Restaurant, Address: 2 West Kingsbridge Road, Zipcode: 10468
 Name: Pelham Bake Shop, Address: 1650 Crosby Ave, Zipcode: 10461
 Name: Mcdonald'S, Address: 1515 Williamsbridge Road, Zipcode: 10461
 Name: Yolanda Pizzeria Restaurant, Address: 292 East 149 Street, Zipcode: 10451
 Name: Gyro King, Address: 2450 Walton Avenue, Zipcode: 10468
 Name: Burger King, Address: 4275 White Plains Road, Zipcode: 10466
 Name: City Island Diner /Snug Bar, Address: 304 City Island Ave, Zipcode: 10464
 Name: P.J. Brady'S Tavern, Address: 3201 Philip Ave, Zipcode: 10465

Name: Bedford Cafe & Restaurant, Address: 1 East Bedford Park Boulevard,
 Zipcode: 10468
 Name: Capri Pizza Restaurant, Address: 2401 Westchester Avenue, Zipcode: 10461
 Name: Pasquale Rigoletto Restaurant, Address: 2311 Arthur Avenue, Zipcode: 10458
 Name: Webster Cafe, Address: 2873 Webster Avenue, Zipcode: 10458
 Name: Tony'S Pizza, Address: 1840 Nereid Avenue, Zipcode: 10466
 Name: Caffè Egidio, Address: 622 East 187 Street, Zipcode: 10458
 Name: Black Whale, Address: 279 City Island Avenue, Zipcode: 10464
 Name: Pizza Express, Address: 2125 White Plains Road, Zipcode: 10462
 Name: Billy'S Sport Bar Restaurant & Lounge, Address: 856 River Avenue, Zipcode:
 10451
 Name: Pizza Italia 1, Address: 842 East 180 Street, Zipcode: 10460
 Name: Steve'S Bakery, Address: 2426 Jerome Avenue, Zipcode: 10468
 Name: La Sabrosura, Address: 25 East 170 Street, Zipcode: 10452
 Name: Blimpie, Address: 372 148 Street, Zipcode: 10455
 Name: Los Girasoles Restaurant, Address: 2613 Webster Avenue, Zipcode: 10458
 Name: Dunkin' Donuts, Address: 1780 East Gunhill Road, Zipcode: 10469
 Name: Cafe Al Mercato, Address: 2331 Hughes Avenue, Zipcode: 10458
 Name: Sam'S Restaurant, Address: 596 Grand Concourse, Zipcode: 10451
 Name: Riverdale Steak House, Address: 5700 Riverdale Avenue, Zipcode: 10471
 Name: Pepe Joes Pizzeria, Address: 722 Courtland Avenue, Zipcode: 10451
 Name: Gino'S Pastry Shop, Address: 580 East 187 Street, Zipcode: 10458
 Name: Mcdonald'S, Address: 1600 Boston Road, Zipcode: 10460
 Name: Loeser'S Hebrew National, Address: 214 West 231 Street, Zipcode: 10463
 Name: Mcdonald'S, Address: 3279 3 Avenue, Zipcode: 10456
 Name: Firozas Roti Bar, Address: 716 Burke Avenue, Zipcode: 10467
 Name: Mcdonald'S, Address: 86 East 167 Street, Zipcode: 10452
 Name: Market Restaurant (C-D Block), Address: 355 Food Center Drive, Zipcode:
 10474
 Name: Behan'S Pub, Address: 4299 Katonah Ave, Zipcode: 10470
 Name: Johnny'S O'S, Address: 2152 Westchester Avenue, Zipcode: 10462
 Name: Joe'S Place, Address: 1841 Westchester Avenue, Zipcode: 10472
 Name: Burger King, Address: 521 East 149 Street, Zipcode: 10455
 Name: Bartow Pizza, Address: 2045 Bartow Avenue, Zipcode: 10475
 Name: Fella'S Bar, Address: 522 City Island Ave, Zipcode: 10464
 Name: Checkers, Address: 344 Baychester Avenue, Zipcode: 10475
 Name: Sammy'S Fishbox, Address: 41 City Island Avenue, Zipcode: 10464
 Name: Snack Bar (Located Between A-B Between Fancy Food And Masters), Address:
 355 Food Center Drive, Zipcode: 10474
 Name: J.R'S Cabaret, Address: 1625 East 233 Street, Zipcode: 10466
 Name: Gary And Gino'S, Address: 3700 Jerome Avenue, Zipcode: 10467
 Name: Parrilla Latina Steakhouse, Address: 5523 Broadway, Zipcode: 10463
 Name: Nick Garden Coffee Shop, Address: 2953 Webster Avenue, Zipcode: 10458
 Name: Latino Restaurant, Address: 494 East 138 Street, Zipcode: 10454
 Name: New Hing Restaurant, Address: 1702 Grand Avenue, Zipcode: 10453
 Name: Emilia'S Restaurant, Address: 2331 Arthur Ave, Zipcode: 10458
 Name: Mi Pueblito Bakery/Comida Tipica Mexicana, Address: 111 East 167 Street,
 Zipcode: 10452

Name: The Barbecue Pit, Address: 5788 Mosholu Avenue, Zipcode: 10471
 Name: Pine Bar & Grill, Address: 1634 Eastchester Road, Zipcode: 10461
 Name: Prospect Coffee Shop, Address: 1309 Prospect Avenue, Zipcode: 10459
 Name: Barnes & Noble Booksellers, Address: 290 Baychester Avenue, Zipcode: 10475
 Name: Mcdonald'S, Address: 101 East 170 Street, Zipcode: 10452
 Name: Market Place Pizza, Address: 0 Hunts Point, Zipcode: 10474
 Name: Jolly Tinker, Address: 2875 Webster Avenue, Zipcode: 10458
 Name: Angelica'S Bakery, Address: 4315 Katonah Ave, Zipcode: 10470
 Name: Captain'S Pizzeria And Restaurant, Address: 1056 Morris Park Ave, Zipcode: 10461
 Name: Mcdonald'S, Address: 1 West Mt Eden Avenue, Zipcode: 10452
 Name: Portofino Cafe, Address: 2008 Williamsbridge Road, Zipcode: 10461
 Name: Ali'S Roti Shop, Address: 4220 White Plains Road, Zipcode: 10466
 Name: Teresa'S Gourmet, Address: 1298 Crosby Ave, Zipcode: 10461
 Name: Susie'S Pies, Address: 2308 Grand Concourse, Zipcode: 10458
 Name: Domino'S Pizza, Address: 738 Morris Park Avenue, Zipcode: 10462
 Name: Domino'S Pizza, Address: 3611 Kingsbridge Avenue, Zipcode: 10463
 Name: Domino'S Pizza, Address: 3706 East Tremont Avenue, Zipcode: 10465
 Name: Domino'S Pizza, Address: 2075 Jerome Avenue, Zipcode: 10453
 Name: Picanteria El Botecito, Address: 151 Bruckner Boulevard, Zipcode: 10454
 Name: Nonis Coffee Shop, Address: 5921 Riverdale Avenue, Zipcode: 10471
 Name: Blue Diner, Address: 217 East 138 Street, Zipcode: 10451
 Name: Applebee'S Neighborhood Grill & Bar, Address: 2276 Bartow Avenue, Zipcode: 10475
 Name: Bally Total Fitness, Address: 298 West 231 Street, Zipcode: 10463
 Name: Morris Park Pizza, Address: 656 Morris Park Avenue, Zipcode: 10462
 Name: Circle Pizzeria, Address: 112 Hugh Grant Circle, Zipcode: 10472
 Name: Bella Napoli, Address: 524 East 240 Street, Zipcode: 10470
 Name: Astral Fitness & Wellness, Address: 5500 Broadway, Zipcode: 10463
 Name: Hong Kong Restaurant, Address: 1811 Williamsbridge Road, Zipcode: 10461
 Name: Caridad, Address: 1436 Williamsbridge Road, Zipcode: 10461
 Name: Dancing Crane Cafe (Bx Zoo), Address: 2300 Southern Boulevard, Zipcode: 10460
 Name: Mcdonald'S, Address: 1600 Bruckner Boulevard, Zipcode: 10473
 Name: Burger King, Address: 2200 Bartow Ave, Zipcode: 10475
 Name: Section 5 Pizza Restaurant, Address: 133 Einstein Loop, Zipcode: 10475
 Name: Step In Restaurant & Lounge, Address: 1309 Metropolitan Avenue, Zipcode: 10462
 Name: Burger King, Address: 217 East Fordham Road, Zipcode: 10458
 Name: Burger King, Address: 2179 White Plains Road, Zipcode: 10462
 Name: Kristy'S Restaurant, Address: 796 Courtlandt Avenue, Zipcode: 10451
 Name: San German Cuchifrito, Address: 1020 Tiffany Street, Zipcode: 10459
 Name: J & J Restaurant & Cuchifritos, Address: 718 East Tremont Avenue, Zipcode: 10457
 Name: Carvel Ice Cream, Address: 560 Morris Avenue, Zipcode: 10451
 Name: Boulevard Tavern, Address: 2918 Bruckner Boulevard, Zipcode: 10465
 Name: Shore Haven Diner, Address: 622 Castle Hill Avenue, Zipcode: 10473
 Name: Jake'S Steakhouse, Address: 6031 Broadway, Zipcode: 10471

Name: Madison'S, Address: 5686 Riverdale Avenue, Zipcode: 10471
 Name: East Dynasty, Address: 1634 Crosby Avenue, Zipcode: 10461
 Name: Mcdonald'S, Address: 724 East 241 Street, Zipcode: 10470
 Name: Ebe Ye Yie African Restaurant, Address: 2364 Jerome Avenue, Zipcode: 10468
 Name: Malecon Restaurant, Address: 55925594 Broadway, Zipcode: 10463
 Name: City Island Deli, Address: 520 City Island Avenue, Zipcode: 10464
 Name: Gurra Cafe, Address: 2325 Arthur Avenue, Zipcode: 10458
 Name: Lin Home Chinese Restaura, Address: 2461 University Avenue, Zipcode: 10468
 Name: To Go Express, Address: 415 City Island Ave, Zipcode: 10464
 Name: Chirping Chicken, Address: 3048 Buhre Avenue, Zipcode: 10461
 Name: Peacock Restaurant, Address: 70 West 183 Street, Zipcode: 10453
 Name: Domino'S Pizza, Address: 2463 Webster Avenue, Zipcode: 10458
 Name: Burger King, Address: 977 Southern Boulevard, Zipcode: 10459
 Name: The Williamsbridge Tavern, Address: 1556 Williamsbridge Rd, Zipcode: 10461
 Name: Vista Hermosa Deli Restaurant, Address: 1201 Evergreen Avenue, Zipcode: 10472
 Name: Vivienne'S, Address: 3044 Westchester Avenue, Zipcode: 10461
 Name: Starbucks Coffee, Address: 1385 Metropolitan Avenue, Zipcode: 10462
 Name: Lin'S Garden, Address: 317 East 170 Street, Zipcode: 10456
 Name: Burger King, Address: 103107 East 161 Street, Zipcode: 10451
 Name: Casa Promesa, Address: 308 East 175 Street, Zipcode: 10457
 Name: Subway, Address: 3422 Jerome Avenue, Zipcode: 10467
 Name: Shalon Restaurant, Address: 2734 Jerome Avenue, Zipcode: 10468
 Name: Broadway Pizza & Pasta, Address: 192 West 231 Street, Zipcode: 10463
 Name: Burger King, Address: 203648 Jerome Avenue, Zipcode: 10453
 Name: Burger King, Address: 1380 Jerome Avenue, Zipcode: 10452
 Name: Domino'S Pizza, Address: 2025 Westchester Avenue, Zipcode: 10462
 Name: Domino'S Pizza, Address: 41 East 167 Street, Zipcode: 10452
 Name: Domino'S Pizza, Address: 1351 Webster Avenue, Zipcode: 10456
 Name: Mi Sueno Restaurant, Address: 152 West Fordham Road, Zipcode: 10468
 Name: Mcdonald'S, Address: 875 Garrison Avenue, Zipcode: 10474
 Name: Mcdonald'S, Address: 982 Southern Boulevard, Zipcode: 10459
 Name: Mr McGoo'S, Address: 5602 Broadway, Zipcode: 10463
 Name: El Buen Ambiente, Address: 108 East 198 Street, Zipcode: 10468
 Name: Popeyes Chicken & Biscuits, Address: 1380 Jerome Avenue, Zipcode: 10452
 Name: Liberato Restaurant, Address: 1 West 183 Street, Zipcode: 10453
 Name: Wilbel Pizza, Address: 605 Southern Boulevard, Zipcode: 10455
 Name: Fordham University - Mcginley Center, Address: 441 East Fordham Road, Zipcode: 10458
 Name: Fordham University/Mcginley Center/Ramskeller Kitchen, Address: 441 East Fordham Road, Zipcode: 10458
 Name: Seafood City, Address: 459 City Island Avenue, Zipcode: 10464
 Name: Carvel, Address: 7565 31 Avenue, Zipcode: 11370
 Name: Fordham University - Millenium Grill, Address: 441 East Fordham Road, Zipcode: 10458
 Name: Fordham University - Student Deli, Address: 441 East Fordham Road, Zipcode: 10458
 Name: La Nueva Giralda Bakery, Address: 104512 Westchester Avenue, Zipcode:

10459
 Name: Sheas Emerald, Address: 2960 Jerome Avenue, Zipcode: 10468
 Name: Memories Lounge, Address: 3048 Fenton Avenue, Zipcode: 10469
 Name: Roca Tone Seafood Restaurant, Address: 3740 White Plains Road, Zipcode: 10467
 Name: The Best Italian Pizza, Address: 412 East 149 Street, Zipcode: 10455
 Name: J.E. Bakery, Address: 743 Astor Avenue, Zipcode: 10467
 Name: Cea Lo Cafe, Address: 1003 Soundview Avenue, Zipcode: 10472
 Name: Mug-Z'S Sports Bar, Address: 2476 Arthur Avenue, Zipcode: 10458
 Name: Frank'S Pizzeria, Address: 2823 Middletown Road, Zipcode: 10461
 Name: Nb. National Bakery, Address: 1193 Walton Avenue, Zipcode: 10452
 Name: New Rainbow Restaurant, Address: 3906 White Plains Road, Zipcode: 10466

```
[22]: query = {
      "cuisine": "Bakery",
      "grades": {
        "$elemMatch": {"grade": "A"}
      }
    }
```

```
[23]: bakery_a_grade_restaurants = collection.find(query)
```

```
[24]: for r in bakery_a_grade_restaurants:
      print(f"Name: {r.get('name', 'N/A')}, Borough: {r.get('borough', 'N/A')}")
```

Name: Morris Park Bake Shop, Borough: Bronx
 Name: Olive'S, Borough: Manhattan
 Name: Tropical House Baking Co., Borough: Brooklyn
 Name: Cousin John'S Cafe And Bakery, Borough: Brooklyn
 Name: Victory Sweet Shop, Borough: Queens
 Name: De Robertis Pastry Shop, Borough: Manhattan
 Name: Lefkos Pygos Cafe, Borough: Queens
 Name: Miracali Bakery, Borough: Queens
 Name: Little Pie Company, Borough: Manhattan
 Name: Sybil'S Bakery, Borough: Queens
 Name: Richer'S Bakery, Borough: Queens
 Name: H & H Midtown Bagels East, Borough: Manhattan
 Name: Fay Da Bakery, Borough: Manhattan
 Name: E & L Bakery & Coffee Shop, Borough: Bronx
 Name: Sugar Bun Bakery, Borough: Queens
 Name: Caffè Roma, Borough: Manhattan
 Name: La Antioquena Bakery Ii, Borough: Queens
 Name: Zaro'S Bread Basket, Borough: Bronx
 Name: Bagels & Cream Deli, Borough: Queens
 Name: Michael'S Pastry Shop, Borough: Brooklyn
 Name: Tai Pan Bakery, Borough: Manhattan
 Name: Bonelle Pastry Shop, Borough: Queens
 Name: Fortunato Bros Cafe & Bakery, Borough: Brooklyn

Name: D'Aquila Bakery, Borough: Queens
Name: J & M Bakery, Borough: Queens
Name: Glaser'S Bakery, Borough: Manhattan
Name: Holtermann'S Bakery, Borough: Staten Island
Name: Lords Bakery, Borough: Brooklyn
Name: La Delice Pastry Shop, Borough: Manhattan
Name: Buono Bakery, Borough: Staten Island
Name: Aliotta Bake Shop, Borough: Brooklyn
Name: Allan'S Bakery, Borough: Brooklyn
Name: V & V Bakery, Borough: Queens
Name: Greenwood Bakery, Borough: Queens
Name: Circo Pastry Shop, Borough: Brooklyn
Name: Andre'S Hungarian, Borough: Queens
Name: Alfonso'S Pastry Shoppe, Borough: Staten Island
Name: Champion Bakery, Borough: Bronx
Name: O.B'S Bakery, Borough: Queens
Name: Mrs. Maxwell'S Bakery, Borough: Brooklyn
Name: Lung Moon Bakery, Borough: Manhattan
Name: Capri Bakery, Borough: Manhattan
Name: Renato'S Pastry Shop, Borough: Staten Island
Name: Pasticceria La Torre, Borough: Queens
Name: Manna House, Borough: Manhattan
Name: Nita'S European Bakery, Borough: Queens
Name: Franco Bakery, Borough: Bronx
Name: Russo'S Bakery, Borough: Queens
Name: Amy'S Bread, Borough: Manhattan
Name: Biarritz Bakery, Borough: Bronx
Name: Paneorama Bakery, Borough: Queens
Name: Pate'S Jeanty, Borough: Queens
Name: Vito'S Bakery, Borough: Brooklyn
Name: Apollo Bakery, Borough: Queens
Name: Zaro'S Bread Basket, Borough: Manhattan
Name: Pitusa Bakery, Borough: Bronx
Name: Alfonso'S Pastry Shoppe, Borough: Staten Island
Name: Zaro'S Bread Basket, Borough: Manhattan
Name: Tous Les Jours, Borough: Queens
Name: Los Angeles Bakery, Borough: Brooklyn
Name: Ramona'S Bakery, Borough: Queens
Name: Amy'S Bread, Borough: Manhattan
Name: Your Bakery, Borough: Brooklyn
Name: The Bagel House, Borough: Queens
Name: Nacional Bakery #1, Borough: Bronx
Name: Levain Bakery, Borough: Manhattan
Name: Chiu Hong Bakery, Borough: Manhattan
Name: Cuccios Bakery, Borough: Brooklyn
Name: Mondial Bakery, Borough: Brooklyn
Name: Sweet Chef Southern Styles Bakery, Borough: Manhattan
Name: Gian & Pier Bakery, Borough: Queens

Name: La Bella Rosa Bakery, Borough: Bronx
Name: Sugar City Bakery, Borough: Bronx
Name: Rio Dela Plata Bakery, Borough: Queens
Name: Balthazar Bakery, Borough: Manhattan
Name: Giralda Bakery, Borough: Bronx
Name: Glendale Bakeshop & Cafe, Borough: Queens
Name: Eleni'S New York, Borough: Manhattan
Name: Zaro'S Bread Basket, Borough: Manhattan
Name: Pelham Bake Shop, Borough: Bronx
Name: Connecticut Muffin, Borough: Brooklyn
Name: Connecticut Muffin, Borough: Brooklyn
Name: Ferrara'S, Borough: Manhattan
Name: Strauss Bakery, Borough: Brooklyn
Name: Krystal European Bakery, Borough: Queens
Name: Caffè Egidio, Borough: Bronx
Name: Pam'S Bakery, Borough: Brooklyn
Name: Jean Danet French Pastry, Borough: Brooklyn
Name: Steve'S Bakery, Borough: Bronx
Name: Leon Bakery, Borough: Manhattan
Name: Gino'S Pastry Shop, Borough: Bronx
Name: Lulu'S Bakery, Borough: Queens
Name: Zaro'S Bakery, Borough: Manhattan
Name: Golden Crown Bakery, Borough: Brooklyn
Name: La Dolce Italia Bakery, Borough: Queens
Name: Pan Fino, Borough: Queens
Name: Make My Cake, Borough: Manhattan
Name: Fay Da Bakery, Borough: Manhattan
Name: Hong Fung Bakery, Borough: Brooklyn
Name: Annelies Pastries, Borough: Manhattan
Name: Kiddie Cakes, Borough: Staten Island
Name: Seven Stars Bakery, Borough: Brooklyn
Name: Angelica'S Bakery, Borough: Bronx
Name: Teresa'S Gourmet, Borough: Bronx
Name: Tai Pan Bakery, Borough: Queens
Name: Tong Hai Tung Bakery, Borough: Queens
Name: Ciro's Pastry Shop, Borough: Queens
Name: Paneantico Bakery, Borough: Brooklyn
Name: Zaro'S Bread Basket, Borough: Manhattan
Name: Labella Ferrara, Borough: Manhattan
Name: Fei Teng Bakery, Borough: Brooklyn
Name: Scala Bakery, Borough: Queens
Name: Silver Moon Bakery, Borough: Manhattan
Name: La Vienesà Spanish Bakery, Borough: Queens
Name: Errol'S Bakery, Borough: Brooklyn
Name: Nelly'S Cakes & Party Supplies, Borough: Brooklyn
Name: Tous Les Jours, Borough: Manhattan
Name: Fabiane'S Cafe & Pastry, Borough: Brooklyn
Name: Moretti Bakery, Borough: Staten Island

Name: El Aguila Bakery, Borough: Brooklyn
Name: El Charro Bakery, Borough: Brooklyn
Name: La Nueva Giralda Bakery, Borough: Bronx
Name: Girasol Bakery, Borough: Queens
Name: El Hornero Bakery, Borough: Queens
Name: Rico Pan Bakery, Borough: Queens
Name: J.E. Bakery, Borough: Bronx
Name: Nb. National Bakery, Borough: Bronx

```
[26]: result = collection.update_one(
    {"name": "Morris Park Bake Shop"},
    {
        "$push": {
            "grades": {
                "grade": "A+",
                "score": 10,
                "date": datetime.utcnow()
            }
        }
    }
)

if result.modified_count > 0:
    print("Grade updated successfully.")
else:
    print("No matching restaurant found or no update made.")
```

Grade updated successfully.

```
[27]: result = collection.delete_many({
    "grades": {
        "$elemMatch": {"grade": "C"}
    }
})

print(f"Deleted {result.deleted_count} restaurants with grade 'C'.")
```

Deleted 496 restaurants with grade 'C'.

```
[ ]:
```