Challenge

Use a NoSQL Database (MongoDB) to Manage Semi-Structured and Unstructured Data

Implementation Environment

- Mongo DB installation steps:
  - Install MongoDB shell here.
  - Download the zip file, extract it, and save it in a desired location.
  - Navigate to the bin folder where the mongosh file is present and copy the path.
  - In the system environment variables, add the path and click ok.
  - For more details on how to set the path for MongoDB refer to the documentation.
  - Open a terminal and enter `mongosh` to enter the mongo terminal.

- Refer to the documentation for aggregate queries.

Restaurant

Storing unstructured data is a challenge for many developers. In this challenge, we will work with and manipulate unstructured data using a NoSQL database like MongoDB.

Restaurant details are given to the food quality control department, to do a QA of the given restaurant. Store the details in a collection of MongoDB.

CHALLENGE

```
{
  "address": {
    "building": "23, Acher Main",
    "street": "marble drive",
    "zipcode": 403204
  },
  "type_of_restaurant": "Bakery",
  "cuisine":["pastry","dessert"],
  "state":"Oklahoma",
  "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": "Park Bake Shop",
  "restaurant_id": "30075445"
}
```


Restaurant Data

- The structure of the data for restaurants is given.
- One sample object of the restaurant is given in the diagram for reference.
- Follow the tasks to work with the data.

Tasks for the Challenge

- Create a database named restaurant_db.
- Insert values using the insertOne and insertMany commands into the restaurant collection.
- At least 5 restaurant objects must be inserted.
- Write MongoDB queries to:
  - Display all the documents in the collection restaurants.
  - Display all restaurants that is of type Bakery.
  - Display restaurants that serve Italian or French cuisine.
  - Display the fields restaurant_id and scores for the zipcode 403204.
  - Display all restaurants that have a grade greater than 10
  - Display the sum of all the scores of restaurants (hint : use aggregation)

Submission Instructions

- There is no boilerplate for the practice.
- Install MongoDB before getting started with the challenge.
- Create a repository named **BEJ_C2_NoSQL_MongoDB_MC_1.**
- Work on the solution in the Mongo shell or MongDB Compass.
- Save the queries in a text editor.
- Push the saved text editor to the created repository.
- Submit for review.