|  |  |  |  |
| --- | --- | --- | --- |
| A picture containing drawing, stop, room  Description automatically generated | Next Generation Technologies  Practical #5 | | |
|  |  |  |  |
| **Name** | Sandeep Jain | **Roll Number** | 21302C0058 |
| **Subject/Course:** | NGT | | |
| **Topic** | MongoDB Advanced Search Queries | | |
|  |  |  |  |
|  | | | |
| **MongoDB Advanced Search Queries** | | | |
| **Import data from restaurant.json file to restaurant collection under mydb database**  **Perform the following operations on the Restaurant data**   1. Write a MongoDB query to display all the documents in the collection restaurants. 2. Write a MongoDB query to display the fields restaurant\_id, name, borough and zip code,   but exclude the field \_id for all the documents in the collection restaurant.   1. Write a MongoDB query to display the first 5 restaurant which is in the borough Bronx. 2. Write a MongoDB query to find the restaurants that achieved a score, more than 80 but less than 100 3. Write a MongoDB query to find the restaurants which locate in latitude value less than -95.754168 4. Write a MongoDB query to find the restaurants which do not prepare any cuisine of 'American'   and achieved a score more than 70 and located in the longitude less than -65.754168.   1. Write a MongoDB query to find the restaurants which do not prepare any cuisine of 'American '   and achieved a grade point 'A' not belongs to the borough Brooklyn. The document must be displayed according to the cuisine in descending order.   1. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'ces' as last three letters for its name. 2. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Wil' as first three letters for its name 3. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Reg' as three letters somewhere in its name 4. Write a MongoDB query to find the restaurants which belong to the borough Bronx and prepared either American or Chinese dish. 5. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which belong to the borough Staten Island or Queens or Bronx or Brooklyn 6. Write a MongoDB query to arranged the name of the cuisine in ascending order and for that same cuisine borough should be in descending order 7. Write a MongoDB query to display all the addresses that contains the street. 8. Write a MongoDB query which will select all documents in the restaurants collection where the coord field value is Double 9. Write a MongoDB query which will select the restaurant Id, name and grades for those restaurants which returns 0 as a remainder after dividing the score by 7. 10. Write a MongoDB query to find the restaurant Id, name, and grades for those restaurants which achieved a grade of "A" and scored 11 on an ISODate "2014- 08-11T00:00:00Z" among many of survey dates. 11. Write a MongoDB query to find the restaurant Id, name, address and geographical location for those restaurants where 2nd element of coord array contains a value which is more than 42 and upto 52. | | | |
| mongoimport --db mydb --collection restaurant --file "D:\NGTpract\restaurants.json"    1 Write a MongoDB query to display all the documents in the collection restaurants.  Code . db.restaurant.find().pretty()  image  2 Write a MongoDB query to display the fields restaurant\_id, name, borough and zip code, but exclude the field \_id for all the documents in the collection restaurant.  Code  .db.restaurant.find({},{restaurant\_id:1,name:1, borough:1, "address.zipcode":1,\_id:0}).pretty()  image  3 Write a MongoDB query to display the first 5 restaurant which is in the borough Bronx.  db.restaurant.find({borough: "Bronx"}).limit(5).pretty()  image  4 Write a MongoDB query to find the restaurants that achieved a score, more than 80 but less than 100  Code  db.restaurant.find({"grades.score":{ $gt:80, $lt:100 }}).pretty()  image  5 Write a MongoDB query to find the restaurants which locate in latitude value less than -95.754168  .  Code  db.restaurant.find({"address.coord":{$lt:-95.754168}}).pretty()  image  6. Write a MongoDB query to find the restaurants which do not prepare any cuisine of 'American' and achieved a score more than 70 and located in the longitude less than -65.754168.  Code  db.restaurant.find({"cuisine":{$ne:"American "},"grades.score":{$gt:70},"address.coord":{$lt:-65.754168}}).pretty()  image  7. Write a MongoDB query to find the restaurants which do not prepare any cuisine of 'American ' and achieved a grade point 'A' not belongs to the borough Brooklyn. The document must be displayed according to the cuisine in descending order.  Code  db.restaurant.find({"cuisine":{$ne:"American "},"grades.grade":"A","borough":{$ne:"Brooklyn"}}).sort({"cuisine":-1}).pretty()  image  8 Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'ces' as last three letters for its name.  Code  db.restaurant.find({"name":{$regex:/ces$/i}},{restaurant\_id:1,name:1, borough:1, "cuisine":1,\_id:0}).pretty()  image  9. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Wil' as first three letters for its name  code  db.restaurant.find({"name":{$regex:/^Wil/i}},{restaurant\_id:1,name:1, borough:1, "cuisine":1,\_id:0}).pretty()  image  10. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Reg' as three letters somewhere in its name  Code  db.restaurant.find({"name":{$regex:/.\*Reg\*./i}},{restaurant\_id:1,name:1, borough:1, "cuisine":1,\_id:0}).pretty()  image  11.a Write a MongoDB query to find the restaurants which belong to the borough Bronx and prepared either American or Chinese dish.  Code  db.restaurant.find({"borough":"Bronx",$or:[{cuisine:"American "},{cuisine:"Chinese"}]}).pretty()    11.b Write a MongoDB query to find the restaurants which belong to the borough Bronx and prepared either American or Chinese dish.  code  db.restaurants.find({"borough":"Bronx","cuisine":{$in:["American ","Chinese"]}}).pretty()    12 Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which belong to the borough Staten Island or Queens or Bronx or Brooklyn  code  db.restaurant.find({"borough":{$in:["Staten Island","Queens","Bronx","Brooklyn"]}},{restaurant\_id:1,name:1, borough:1,cuisine:1, \_id:0}).pretty()    13. Write a MongoDB query to arranged the name of the cuisine in ascending order and for that same cuisine borough should be in descending order  Code  db.restaurant.find().sort({"cuisine":1,"borough":-1}).pretty()    14. Write a MongoDB query to display all the addresses that contains the street.  code  db.restaurant.find({"address.street":{$exists:true}}).pretty()    15. Write a MongoDB query which will select all documents in the restaurants collection where the coord field value is Double  Code  db.restaurants.find({"address.coord":{$type:1}}).pretty()    16. Write a MongoDB query which will select the restaurant Id, name and grades for those restaurants which returns 0 as a remainder after dividing the score by 7.  code  db.restaurants.find({"grades.score":{$mod:[7,0]}},{restaurants\_id:1,name:1,grades:1,\_id:0}).pretty()    17. Write a MongoDB query to find the restaurant Id, name, and grades for those restaurants which achieved a grade of "A" and scored 11 on an ISODate "2014- 08-11T00:00:00Z" among many of survey dates  Code  db.restaurant.find({"grades.grade":"A","grades.score":11,"grades.date":ISODate("2014-08-11T00:00:00Z")},{"restaurant\_id":1,"name":1,"grades":1}).pretty()    18 Write a MongoDB query to find the restaurant Id, name, address and geographical location for those restaurants where 2nd element of coord array contains a value which is more than 42 and upto 52.  Code  db.restaurant.find({"address.coord.1":{$gt:42,$lte:52}},{"restaurant\_id":1,"name":1,"address":1,"address.coord":1,\_id:0}).pretty() | | | |