

EX.NO.6

Import a JSON file from the command line. Apply the following actions with the data present in the JSON file where, projection, aggregation, remove, count, limit, skip and sort

AIM:

To import a JSON file from the command line and apply the following actions with the data present in the JSON file where, projection, aggregation, remove, count, limit, skip and sort using MongoDB.

PROCEDURE:

1. Open command prompt and run `mongod` to start the MongoDB server.
2. Then open another command prompt and run `mongosh` to activate MongoDB shell.
3. Create a database using use `<database_name>`.
4. To import the JSON file use this command:

```
mongoimport --db --mydb --collection employees --file  
C:\Users\mercy\Downloads\employees.json --jsonArray
```

5. After importing the JSON file perform specific commands for projection, aggregation, remove, count, limit and sort.

OUTPUT:

```
C:\Users\jazil>jq --version  
jq-1.7.1  
  
C:\Users\jazil>python3 --version  
Python 3.12.6  
  
C:\Users\jazil>pip3 --version  
pip 24.2 from C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.12_3.12.1776.0_x64__qbz5n2kfra8p0\Lib\site-  
packages\pip (python 3.12)
```

```
PS C:\Users\jazil> jq '.[] | {name: .name, salary: .salary}' "C:/Users/jazil/OneDrive/Documents/DataAnalytics/employees.json"
{
  "name": "Alice Johnson",
  "salary": 70000
}
{
  "name": "Bob Smith",
  "salary": 55000
}
{
  "name": "Charlie Davis",
  "salary": 60000
}
{
  "name": "Dana Lee",
  "salary": 65000
}
{
  "name": "Eve Martinez",
  "salary": 75000
}
```

```
PS C:\Users\jazil> jq ' [.[] | .salary] | add' "C:\Users\jazil\OneDrive\Documents\DataAnalytics\employees.json"
825000
```

```
PS C:\Users\jazil> jq '. | length' employees.json "C:\Users\jazil\OneDrive\Documents\DataAnalytics\emp
jq: error: Could not open file employees.json: No such file or directory
5
```

```
PS C:\Users\jazil> jq 'sort_by(.age)' "C:\User
[
  {
    "id": 3,
    "name": "Charlie Davis",
    "department": "Engineering",
    "age": 25,
    "salary": 60000
  },
  {
    "id": 1,
    "name": "Alice Johnson",
    "department": "Engineering",
    "age": 29,
    "salary": 70000
  },
  {
    "id": 2,
    "name": "Bob Smith",
    "department": "Marketing",
    "age": 35,
    "salary": 55000
  },
  {
    "id": 4,
    "name": "Dana Lee",
    "department": "Human Resources",
    "age": 40,
    "salary": 65000
  },
  {
```

```
PS C:\Users\jazil> jq 'sort_by(.age)' "C:\Users\jazil\OneDrive\Documents\DataAnalytics\employees.json"
[
  {
    "id": 3,
    "name": "Charlie Davis",
    "department": "Engineering",
    "age": 25,
    "salary": 60000
  },
  {
    "id": 1,
    "name": "Alice Johnson",
    "department": "Engineering",
    "age": 29,
    "salary": 70000
  },
  {
    "id": 2,
    "name": "Bob Smith",
    "department": "Marketing",
    "age": 35,
    "salary": 55000
  },
  {
    "id": 4,
    "name": "Dana Lee",
    "department": "Human Resources",
    "age": 40,
    "salary": 65000
  },
  {
    "id": 5,
```

RESULT:

Thus to import a JSON file from the command line and apply the following actions with the data present in the JSON file where, projection, aggregation, remove, count, limit, skip and sort using MongoDB is completed successfully.