NO SQL Project Format

Individual Project

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Dataset Link: https://www.kaggle.com/datasets/rohitsahoo/employee

1. **AGGREGATION query: To calculate the average salary of an employee**

```
/** * _id: The id of the group. * fieldN: The first field name. */ { _id: null, avgSalary: { $avg: "$MonthlyIncome", }, } /** * Provide any number of field/order pairs. */ { _id: 0, avgSalary: 1, }
```

1. **AGGREGATION query: To find department with highest salary**

```
/** * _id: The id of the group. * fieldN: The first field name. */ { _id: "$Department", maxSalary: { $max: "$MonthlyIncome", }, } /** * Provide any number of field/order pairs. */ { maxSalary: -1, } /** * Provide the number of documents to limit. */ 1
```

1. **AGGREGATION query: Department with highest performance rating**

```
/** * _id: The id of the group. * fieldN: The first field name. */ { _id: "$Department", DepartmentRating: { $avg: "$PerformanceRating", }, } /** * specifications: The fields to * include or exclude. */ { _id: 0, Department: "$_id", DepartmentRating: 1, } /** * Provide any number of field/order pairs. */ { DepartmentRating: -1, } /** * Provide the number of documents to limit. */ 1
```

1. **AGGREGATION query: Department with lowest number of employees**

```
/** * _id: The id of the group. * fieldN: The first field name. */ { _id: "$Department", count: { $sum: 1, }, } /** * Provide any number of field/order pairs. */ { count: 1, } /** * Provide the number of documents to limit. */ 1
```

2. **Comparison and Logical operators : Find employee in sales department or employee age above 35 years.**

```
{ "$or": [{ Department: "Sales" }, { Age: { $gt: 35 } }] }
```

2. **Comparison and Logical operators: Find employees with a monthly income lt or eq 5000 or working more than 5 years in the current role**

```
{ "$nor": [ { MonthlyIncome: { $lt: 5000 } }, { YearsInCurrentRole: { $gt: 5 } } ] } {MonthlyIncome:1,YearsInCurrentRole:1}
```

3. **$expr: Employee who spent more time in the company than in their current role.**

```
{"$expr": {$gt: ["$YearsAtCompany", "$YearsInCurrentRole"]}}
Implication:If it is true, it helps to find out employees who gas got promotion or role change in the company.
```

3. **$expr: Employees who joined before 30 yrs and have more than 5 yrs of experience.**

```
{"$expr": {"$and": [{"$lt": ["$Age", 30]}, {"$gt": ["$YearsAtCompany", 5]}]}} Implication: Loyal employees, Experienced early achievers , Valuable assets.
```

4. **Array , sub document etc.., # sample restaurants To find restaurant with grade A and score above 10.**

```
{"grades": {$elemMatch: {grade: "A", score: {$gte: 10}}}}
```

4. **Array , sub document etc.., To find the building number 2780**

```
{"address.building": "2780"}
```

4. **Array , sub document etc.., To find the restaurants located in Stillwell avenue and Brooklyn**

```
{"address.street": {"$eq":"Stillwell Avenue"}, "borough":
{"$eq":"Brooklyn"}}
```

4. **Array , sub document etc.., To find the restaurants which has Co-ordaiantes**

```
{"address.coord":{ $exists: true }}
```

Dataset Link:https://www.kaggle.com/datasets/elvinrustam/imdb-movies-dataset

5. **Link for the Chart Dashboard**

```
Link 1:https://charts.mongodb.com/charts-no-sql-task-
qkwgs/dashboards/6579c0de-d62d-4dfe-8495-
c85397d2a0ee/charts/84b16b97-f246-4378-a7f3-5f7f0db23373 Link
2:https://charts.mongodb.com/charts-no-sql-task-
qkwgs/dashboards/6579c0de-d62d-4dfe-8495-
c85397d2a0ee/charts/acf93dea-f497-4aa4-b130-5eb12b86d9fc
```