



NoSQL Aggregates

Roll No: 18

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Create a collection named "student_database" and insert 5 records with following document schema:

➤ db.createCollection("student_database");

S_name, S_roll_no, NoSQL, Python, OOAD, CCV, DAA, interests:[Array]

Inserting Records

```
Enterprise NoSQL_Collage> db.student_database.insertMany([
    {
        S_name: "Smit Joshi",
        S_roll_no: 18,
        NoSQL: 30,
        Python: 50,
        OOAD: 34,
        CCV: 37,
        DAA: 41,
        interests: ["Blogging", "Writing", "Cooding"]
    },
    {
        S_name: "Vijay Joshi",
        S_roll_no: 8,
        NoSQL: 34,
        Python: 40,
        OOAD: 24,
        CCV: 27,
        DAA: 31,
        interests: ["Accounting", "Teaching", "Dancing"]
    },
    {
        S_name: "Tejasvi sharma",
        S_roll_no: 1,
        NoSQL: 40,
        Python: 50,
        OOAD: 44,
        CCV: 47,
        DAA: 45,
        interests: ["Reading", "Writing"]
    },
    {
        S_name: "Hiten Joshi",
        S_roll_no: 17,
        NoSQL: 40,
        Python: 40,
        OOAD: 36,
        CCV: 38,
```

```

        DAA: 31,
        interests: ["Blogging", "Writing"]
    },
    {
        S_name: "Hiten Thakkar",
        S_roll_no: 48,
        NoSQL: 40,
        Python: 39,
        OOAD: 38,
        CCV: 30,
        DAA: 21,
        interests: ["Travelling", "Reading"]
    }
]);

{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("65105b7890dff8b1de8b80ba"),
    '1': ObjectId("65105b7890dff8b1de8b80bb"),
    '2': ObjectId("65105b7890dff8b1de8b80bc"),
    '3': ObjectId("65105b7890dff8b1de8b80bd"),
    '4': ObjectId("65105b7890dff8b1de8b80be")
  }
}

```

Based on the above collection, write a mongodb query for the following:

1. min

```

Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", min: { $min:
"$NoSQL" } } });

[ { _id: '', min: 30 } ]

```

max

```

Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", max: { $max:
"$NoSQL" } } });

[ { _id: '', max: 40 } ]

```

sum

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", combined_sum: {  
$sum: "$CCV" } } });  
  
[ { _id: '', combined_sum: 179 } ]
```

avg

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", combined_avg: {  
$avg: "$CCV" } } });  
  
[ { _id: '', combined_avg: 35.8 } ]
```

first

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", first: { $first:  
"$Python" } } });  
  
[ { _id: '', first: 50 } ]
```

last

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", last: { $last:  
"$Python" } } });  
  
[ { _id: '', last: 39 } ]  
]
```

push

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", all_Marks: { $push:  
"$NoSQL" } } });  
  
[ { _id: '', all_Marks: [ 30, 34, 40, 40, 40 ] } ]
```

addToSet

```
Enterprise NoSQL_Collage> db.student_database.aggregate({ $group: { _id: "", all_Marks: {  
$addToSet: "$NoSQL" } } });  
  
[ { _id: '', all_Marks: [ 30, 40, 34 ] } ]
```