

# How can I calculate the median value in MongoDB?

Authored by  
**stats writer**

June 30, 2024

## RECOMMENDED CITATION

stats writer (2024). *How can I calculate the median value in MongoDB?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=162886>

To calculate the median value in MongoDB, one can use the aggregation framework and the `$median` operator. This allows for the calculation of the middle value in a set of numerical data, taking into account the size of the dataset. The `$median` operator can be used in combination with other operators, such as `$group` and `$project`, to refine the data and obtain a more accurate result. This approach is useful for analyzing large datasets and can help in making data-driven decisions. Overall, calculating the median value in MongoDB is a simple and efficient process that can be easily integrated into data analysis workflows.

## Calculate the Median Value in MongoDB

You can use the following syntax to calculate the median value in MongoDB:

```
db.teams.find().sort(                {"points":1}
).skip(db.teams.count() / 2).limit(1);
```

Note that in this example we calculate the median value of the `points` field for the collection named `teams`.

The following example shows how to use this syntax with a collection `teams` with the following documents:

```
db.teams.insertOne({team: "Mavs", position: "Guard",
points: 31})db.teams.insertOne({team: "Spurs",
position: "Forward", points:
22})db.teams.insertOne({team: "Rockets", position:
"Center", points: 19})db.teams.insertOne({team:
"Warriors", position: "Forward", points:
```

```
26})db.teams.insertOne({team: "Cavs", position: "Guard", points: 33})
```

Example: Calculate the Median Value in MongoDB

We can use the following code to calculate the median value of the 'points' field:

```
db.teams.find().sort( {"points":1} ).skip(db.teams.count() / 2).limit(1);
```

This returns the following result:

```
{ _id: ObjectId("61f943e867f1c64a1afb2032"), team: 'Warriors', position: 'Forward', points: 26 }
```

This tells us that the median value in the "points" field is 26.

We can manually verify this by calculating the median value by hand.

We can see that we have the following values in the

**"points" column:**

**Points: 31, 22, 19, 26, 33**

**First, we can rearrange the values from smallest to largest:**

**Points: 19, 22, 26, 31, 33**

**Then the median value is simply the value in the middle, which is 26:**

**This matches the value that we calculated using MongoDB.**

**Note: You can find the complete documentation for the `find()` function .**

**Additional Resources**

**The following tutorials explain how to perform other common operations in MongoDB:**