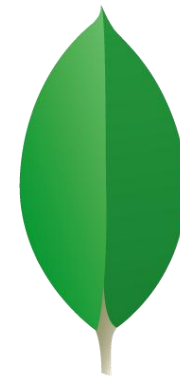


Aggregation Pipeline



mongoDB

Aggregation Pipeline

It's a framework for performing aggregation tasks, modeled on the concept of data processing pipelines.

Using this framework, MongoDB passes the documents of a single collection through a pipeline.

The pipeline transforms the documents into aggregated results, and is accessed through the aggregate database command.

Aggregation pipeline basically has two phases:

\$match and \$group

Aggregation Pipeline

Student

{ Stud_id: "A123", Fees: 5000, Section: "A" }
{ Stud_id: "A123", Fees: 2500, Section: "A" }
{ Stud_id: "B212", Fees: 3000, Section: "A" }
{ Stud_id: "A123", Fees: 2000, Section: "D" }

```
db.student.aggregate([ { $match: { Section: "A" } },  
                        { $group: { _id: "$stud_id", Total: { $sum: "$Fees" } } } ] )
```

\$match



{ Stud_id: "A123", Fees: 5000, Section: "A" }
{ Stud_id: "A123", Fees: 2500, Section: "A" }
{ Stud_id: "B212", Fees: 3000, Section: "A" }

\$group



{ _id: "A123", Total: 7500 }
{ _id: "B212", Total: 3000 }

Hands-On



Pipeline

Pipeline means the possibility to execute an operation on some input and use the output as the input for the next command and so on.

There is a set of possible stages and each of those is taken a set of documents as an input and is producing a resulting set of documents.