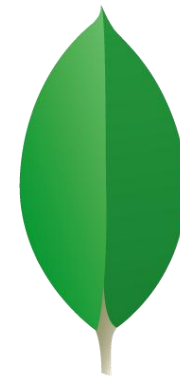


# Map Reduce



mongoDB

# Map-reduce

- Map-reduce is a data processing paradigm for condensing large volumes of data into useful aggregated results.
- MongoDB uses map-Reduce command for map-reduce operations.
- Map-Reduce is generally used for processing large data sets.
- Its commands allows you to run map-reduce aggregation operations over a collection.

# Map-reduce

## 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" }

query



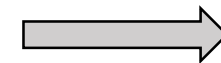
{ Stud_id: "A123", Fees: 5000, Section: "A" }
{ Stud_id: "A123", Fees: 2500, Section: "A" }
{ Stud_id: "B212", Fees: 3000, Section: "A" }

map



{"A123": [5000, 2500]}
{"B212": 3000}

reduce



fees\_total

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

```
db.student.mapReduce(
```

```
function() {emit (this.stud_id, this.fees); },  
function(key, values ) {return Array.sum(values)},  
{ query : {Section: "A"}, out: "fees_total" })
```

# Hands-On

