MongoDB Update Operations with Examples

# Sample Collection: db.employees

db.employees.insertMany([  
 {  
 "\_id": 1,  
 "name": "Alice",  
 "age": 30,  
 "department": "HR",  
 "salary": 5000,  
 "skills": ["communication", "management"],  
 "active": true  
 },  
 {  
 "\_id": 2,  
 "name": "Bob",  
 "age": 25,  
 "department": "IT",  
 "salary": 7000,  
 "skills": ["javascript", "nodejs", "mongodb"],  
 "active": false  
 },  
 {  
 "\_id": 3,  
 "name": "Charlie",  
 "age": 35,  
 "department": "Finance",  
 "salary": 6500,  
 "skills": ["excel", "accounting"],  
 "active": true  
 },  
 {  
 "\_id": 4,  
 "name": "Diana",  
 "age": 28,  
 "department": "IT",  
 "salary": 7200,  
 "skills": ["python", "mongodb"],  
 "active": true  
 }  
])

## updateOne

Goal: Set active to true for Bob

db.employees.updateOne(  
 { name: "Bob" },  
 { $set: { active: true } }  
)

Explanation: Finds the first document where name is Bob and sets active to true.

## updateMany

Goal: Give everyone in IT department a 500 raise

db.employees.updateMany(  
 { department: "IT" },  
 { $inc: { salary: 500 } }  
)

Explanation: Increases salary by 500 for all employees in IT.

## $inc

Goal: Increase Charlie's age by 1

db.employees.updateOne(  
 { name: "Charlie" },  
 { $inc: { age: 1 } }  
)

Explanation: Increments age to 36.

## $min

Goal: If Alice’s salary is higher than 4500, reduce it to 4500

db.employees.updateOne(  
 { name: "Alice" },  
 { $min: { salary: 4500 } }  
)

Explanation: Updates salary only if current salary is more than 4500.

## $max

Goal: If Diana’s salary is less than 7500, update it to 7500

db.employees.updateOne(  
 { name: "Diana" },  
 { $max: { salary: 7500 } }  
)

Explanation: Updates salary only if current salary is less than 7500.

## $mul

Goal: Increase all Finance department salaries by 10%

db.employees.updateMany(  
 { department: "Finance" },  
 { $mul: { salary: 1.10 } }  
)

Explanation: Multiplies salary by 1.10.

## $unset

Goal: Remove skills from Bob’s document

db.employees.updateOne(  
 { name: "Bob" },  
 { $unset: { skills: "" } }  
)

Explanation: Removes the skills field.

## $rename

Goal: Rename department to dept for Alice

db.employees.updateOne(  
 { name: "Alice" },  
 { $rename: { department: "dept" } }  
)

Explanation: Renames the department field to dept.

## Upsert

Goal: Insert new employee Eve if \_id: 5 does not exist

db.employees.updateOne(  
 { \_id: 5 },  
 {  
 $set: {  
 name: "Eve",  
 age: 26,  
 department: "Marketing",  
 salary: 4800,  
 active: true  
 }  
 },  
 { upsert: true }  
)

Explanation: Inserts a new document if \_id: 5 does not exist; otherwise updates it.